# THE BUILDER
## A JOURNAL FOR THE ARCHITECT & CONSTRUCTOR

VOL. CXLV NOVEMBER 10 1933 No. 4736

NEW GYMNASIUM (LEFT) AND SWIMMING POOL, BEDFORD SCHOOL, BEDFORD.

MR. OSWALD P. MILNE, F.R.I.B.A., Architect.

(See also pages 736, 739-41.)

## MEETINGS

FRIDAY, *November* 10.

*British Steelwork Association.* Luncheon. At Grosvenor House, W.1. 1 p.m.

*Town Planning Institute.* Presidential Address by Mr. T. Alwyn Lloyd. At Caxton Hall, S.W.1. 6 p.m.

*Institution of Structural Engineers (Midland Counties Branch).* Mr. H. W. Coultas on "Military Engineering." At Birmingham. 6.30 p.m.

*Institution of Structural Engineers (Western Counties Branch).* Mr. Ewart S. Andrews on "Test Results on Structural Steel Sections." At Bristol. 7.15 p.m.

*Civil Engineering Society of the Glasgow Royal Technical College.* Mr. F. J. Tansley on "Is Structural Engineering a Science?" 7.45 p.m.

SATURDAY, *November* 11.

*St. Paul's Ecclesiological Society.* Visit to St. Mary-at-Hill, E.C. 2.30 p.m.

*Architectural Association.* Mr. W. Harding Thompson on "Housing Problem: Solution for the Country." 3 p.m.

MONDAY, *November* 13.

*Institution of Heating and Ventilating Engineers.* Mr. S. F. Greenland on "Practical Determination of Heat Transmission from Buildings." At the Borough Polytechnic, S.E.1. 7 p.m.

*Institution of Structural Engineers (South Wales and Monmouthshire Branch).* Mr. C. J. Price on "Dynamics of Bridges." At Cardiff. 7 p.m.

*Chartered Surveyors' Institution.* Presidential Address by Mr. Percival F. Tuckett 8 p.m.

TUESDAY, *November* 14.

*Chadwick Public Lectures.* Mr. R. O. Moon on "Housing and Town Planning in Relation to Public Health." At 25, Portland-place, W.1. 5.30 p.m.

*Illuminating Engineering Society.* Major R. H. S. Mealing on "The Development of Aviation Lighting." At the Institution of Mechanical Engineers, Storey's Gate, S.W.1. 7 p.m.

*Morley College Lectures.* Mr. F. Towndrow on "Modern Architecture." 8 p.m.

*St. Paul's Ecclesiological Society.* Mr. A. T. Bolton on "English Parish Church, Wren and the Eighteenth Century." At 9, Conduit-street, W.1. 8 p.m.

WEDNESDAY, *November* 15.

*Liverpool Architectural Society.* Mr. Edward Maufe on "Modern Churches." 6 p.m.

*L.C.C. Central School of Arts and Crafts.* Sir Banister Fletcher on "Italian Mediæval Architecture: IV." 6 p.m.

*Institution of Heating and Ventilating Engineers (Manchester and District Branch).* Mr. C. M. V. Benewll on "Instruments used in connection with Air-conditioning Plant." 7 p.m.

*Clerks of Works, Building and Civil Engineering Foremen's Association of Scotland.* Mr. A. B. Robinson on "Building, from an Insurance Point of View." At the Heriot-Watt College, Edinburgh. 8 p.m.

THURSDAY, *November* 16.

*L.C.C. Geffrye Museum Lectures.* Mr. H. Cescinsky on "Sheraton." 7.30 p.m.

*Society of Antiquaries.* Mr. C. J. P. Cave on "Bosses in Canterbury Cathedral"; and Messrs. C. J. P. Cave and L. E. Tanner on "A Thirteenth-century Choir of Angels in the North Transept of Westminster Abbey." 8.30 p.m.

FRIDAY, *November* 17.

*Institution of Welding Engineers (Midland Branch).* Mr. F. Leverick on "Stainless Steels and their Treatment." At Birmingham.

MONDAY, *November* 20.

*Institution of Mechanical Engineers.* Mr. R. H. B. Forster on "Oil-fired Furnaces." 6.45 p.m.

TUESDAY, *November* 21.

*Chadwick Public Lectures.* Dr. Charles Porter and Mr. W. H. Draper on "The One-Pipe System of House Drainage in Theory and Practice." At the London School of Hygiene, W.C.1. 5 p.m.

*Morley College Lectures.* Mr. F. Towndrow on "New Architecture of Austria, Germany, and France." 8 p.m.

WEDNESDAY, *November* 22.

*L.C.C. Central School of Arts and Crafts.* Sir Banister Fletcher on "Italian Mediæval Architecture: V." 6 p.m.

*Institution of Structural Engineers. (Scottish Branch).* Mr. A. Leitch on "Specification Problems." At Glasgow. 7.30 p.m.

ST. MARY REDCLIFFE, BRISTOL.

From a Drawing by MR. A. C. FARE, R.W.A., A.R.I.B.A. (See page 736.)

# TRADITIONALISM AND MODERNISM.

THE opening meeting of a new session of the Royal Institute of British Architects has for years past been an occasion for some speculation arising from the topics considered in the Presidential Address—an occasion, after the summer vacation, when architects, refreshed like other men, are more prepared to discuss questions affecting them and their art or business. For the most part these addresses are of a scholarly and academic character, and what may be called the politics of the profession are ignored, but they have generally reached a high level of interest, while at times they have been of an exceptional character, and have had considerable influence on current thought and practice. It must be confessed that these exceptional addresses are rare, but we believe it will be agreed on all hands that the one which Sir Giles Scott delivered on Monday deserves to be placed in the category of the exceptional.

The subject discussed was "Traditionalism and Modernism," and though extremists in both camps may challenge some of the President's conclusions, we are convinced they cannot fail to be impressed by his directness and obvious sincerity. For our part, realising the importance of tradition in architecture, and at the same time the value of and necessity for sane modernism, we have rarely, if ever, heard wiser, saner, or more thoughtful observations on the subject. Coming from an architect of the outstanding ability of the President, its influence should be far-reaching, and should have a sobering effect on minds eager for change and what is sometimes misnamed "progress."

The text of the address may be said to be an observation—a remarkable observation in the light of recent architectural history—by the President's grandfather, Sir George Gilbert Scott, R.A., who, coming under the influence of Pugin at the time of the fierce discussions between Gothicists and Classicists, wrote: "I was from that moment a new man, old things had become new, or rather modernism had passed away from me and every aspiration of my heart had become mediæval." The curious way in which the pendulum of thought and belief swings from side to side, as shown in this quotation, was the basis of the President's address, and he had no difficulty in showing how a middle line is kept in nature and in human affairs, where extremists in strong opposition are busy "cancelling each other out and preserving nature's great game of balance." He referred to the effect of unintelligent Traditionalism on both the art of architecture and on practical business men, who had little or no use for architects who came to be looked upon as purveyors of ornament and therefore not required in industrial buildings, but he pointed out that the reputation architects gained in their indulgence in academic revivals of past styles was not altogether deserved, as the profession has always had fine planners and level-headed men of vision; but they no doubt carried these academic exercises to excess, and it may well be that this is why their services have not been required by industrialists as much as they should, and why so many buildings have been erected by men who were not architects. This, of course, produced a reaction, and now "the pendulum swings violently over, and, as usual, swings too far."

The address is given in full on p. 734, but we should like to quote here some of the President's aphorisms, if only to give emphasis to them:

"The motto is 'now build in truth and let beauty take care of itself.'"

"Away with tradition, away with ornament, away with everything save grim, stark functionalism."

"Buildings must become machines, they must be built by machines, they must look like machines, they must function like machines."

"Why is it so difficult to remedy a defect without going too far?"

"Extremes are always wrong in themselves. Yet we find it difficult to resist the pleasure of indulging in them; they are so stimulating and exciting and well suited to these fast and restless times."

"The modernist crank can be as stupid as the old 'art and crafty' crank."

"The greatest artists are those who, though capable of going to extremes, studiously avoid doing so."

"In art, the struggle of opposites and the resulting delicate nervous poise between extremes must be fought out in a single individual—the artist."

"I should feel happier about the future of architecture had the best ideas of Modernism been grafted upon the best traditions of the past; in other words, if Modernism had come by evolution rather than by revolution."

"There is a lot of functional nonsense about extreme Modernism, though logical expression of materials is claimed as one of its fundamental principles."

"I am afraid it is a craving for a striking effect rather than for functionalism expressing construction that leads the extreme modernist to tell the same constructional lies that he condemns so heartily in the work of the extreme traditionalist."

"Let us avoid being extreme, even if it does in these vulgar days pay to be sensational."

"Let us aim at quality rather than novelty, so that we may produce buildings that are not only efficient, practical and functional, but also refined and beautiful."

The fairness of the criticism and the clear and temperate manner in which the case for a middle course is put should appeal to all students, whether they be modernists or traditionalists. There are commendatory words for some modernistic ideas and characteristics, and the impartial nature of the summing up will be realised from the following:—

"I think it would be a serious loss to architectural development if it (modernist work) were swept completely away in a violent reaction. I doubt if it could be so completely wiped out as to leave no trace of its influence behind. I want to see its best features and characteristics retained and grafted at first on to the traditions of the past and then gradually developed not by a group but by all architects in the country working together on the same lines; only in this way can we build up a style worthy of the name and only by such a process of gradual evolution, developed by a great number of individuals, can we attain a quality that will enable us to produce a style worthy to compare with the styles of the past."

We believe these remarks of Sir Giles will be endorsed by most architects, who will probably agree that along the lines indicated we may expect a sane development of architectural art. It may appear from a perusal of the address that Sir Giles has paid insufficient attention to the influence of the exceptionally gifted individual who is found from time to time and whose influence and personality on contemporary thought and practice cannot be ignored. Is it not inevitable that one who may be called a genius must dominate in some measure the work of others? His work and influence must, of course, be grafted on to what has gone before, but its distinctive individuality might be so assertive that the "law of opposing forces" would cease to operate.

We have made copious quotations from the address because we think the questions discussed are of paramount importance to architects and because the considered opinions of one who stands so high in the esteem of the profession should have great weight, and should be a corrective to much inconclusive admonition on the part of extremists anywhere.

# NOTES

**Cardiff Civic Society.**

We have already referred to the formation of a Civic Society for Cardiff, and we are glad to announce that the first general meeting was held last week in the City Hall under the chairmanship of the Lord Mayor of Cardiff. The new society is making a very promising start, as not only has the Marquis of Bute accepted the office of President, but a distinguished number of vice-presidents have been appointed as well as a capable executive, including Mr. T. Alwyn Lloyd, President of the Town Planning Institute, and Mr. Percy Thomas, with Mr. W. S. Purchon as Hon. Secretary. The good work carried out by the Birmingham Civic Society and other similar societies is known to our readers, and there is every reason to expect that the Cardiff Society will have a long and useful career. The objects of the Society are—"To promote a fuller understanding of the historical growth of Cardiff and assist in the preservation of places of historic interest or natural beauty. To advocate the maintenance of high standards in design in all buildings. To encourage the acquisition of open spaces and the brightening of public places. To exercise vigilance to prevent acts of vandalism. To work for a more beautiful city by stimulating a pride in Cardiff's achievements and by co-operating with the civic and educational authorities, the National Museum, and other bodies for the development of local art and industry and pride of city. The Society will carry out these objects by representations to those concerned, by private negotiations, by letters or articles in the Press, by exhibitions, lectures and competitions." Such objects should ensure the success of the Society, and should be an incentive to the citizens not only to preserve the amenities of their city but to do all they can to increase them.

**The Royal Scottish Academy, Edinburgh.**

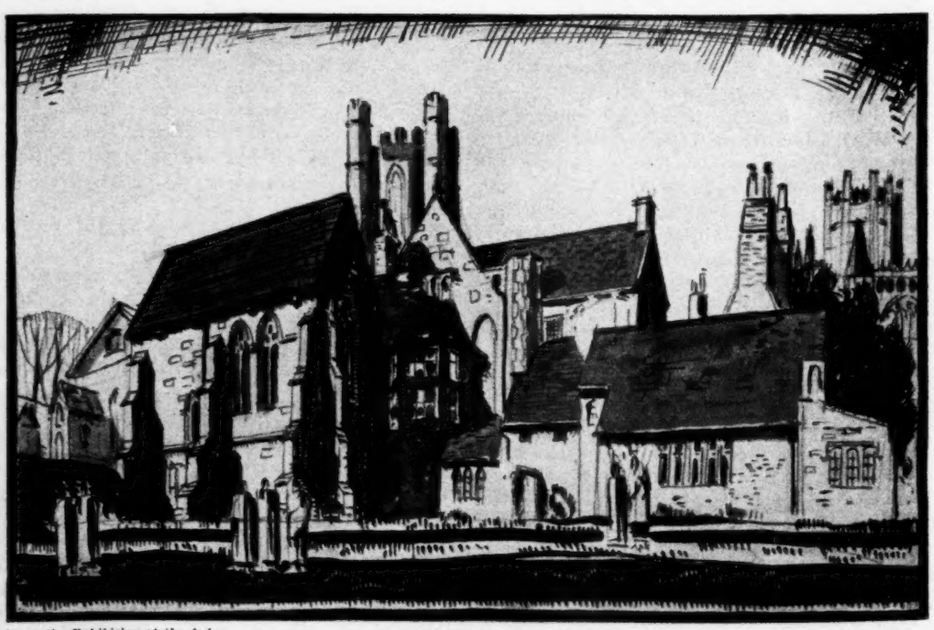
A correspondent writes to us as follows: —"Another of those controversies for which Edinburgh has perhaps an unenviable reputation, appears inevitable. The contention is the renewed suggestion to cut off a series of columns at the portico of the Royal Scottish Academy, and by a reconstruction of the steps gain about eight feet to the width of Princes-street. Regarded artistically and æsthetically, the proposal smacks of sheer utilitarianism and vandalism. The portico is part and parcel of a finely balanced building, and to lop off its nose is to mar not only its face, but the balance of the whole figure, which with the National Gallery behind gives a truly classic dignity to the city. The increase of traffic in Princes-street and on the Mound has been so great in recent years that a widening at this point is essential. The Mound is the only convenient starting point for the many 'bus routes. Even if the 'bus traffic were diverted elsewhere, the street traffic of other kinds tends to a state of congestion at this point, and whatever may be the eventual state of matters, it is evident that for years to come the volume of traffic is sure to increase. To accommodate the growing traffic and retain the portico unblemished seem to be the irreconcilable propositions. It goes without saying that to tamper with the frontage of one of the city's classic buildings should be the last expedient, resorted to only when it is fully shown that in no other way can the difficulty be overcome."

**An Alternative Scheme.**

A possible solution of the problem, involving no interference with the portico of the Royal Scottish Academy building, is outlined by a correspondent of *The Scotsman*. The R.S.A. building, as our readers will remember, stands on the axial line of Hanover-street, of which it fills the vista, and the suggestion is made that the buildings at both corners of Princes-street and Hanover-street, which are said to have "no material or artistic value," should be acquired by the Town Council and be rebuilt in crescent form. It is claimed that, if this were done, the additional width obtained would enable such a deflection to be made in the tramway lines as would permit of a double line of traffic on their south side, and a broadening of the pavement in the centre of the Academy building which would allow the readjustment of its slope "to meet the centralisation of the steps of access." The scheme, as illustrated in our contemporary, seems quite feasible and might well be considered by the Town Council as a practicable alternative to interference with the Academy building.

**Building Trade Wages.**

Sir Francis Fremantle, M.P., who is Chairman of the Conservative Housing Committee in the House of Commons, has just published a survey of the housing problem. Of interest to builders is his reference to wages and salaries in the building



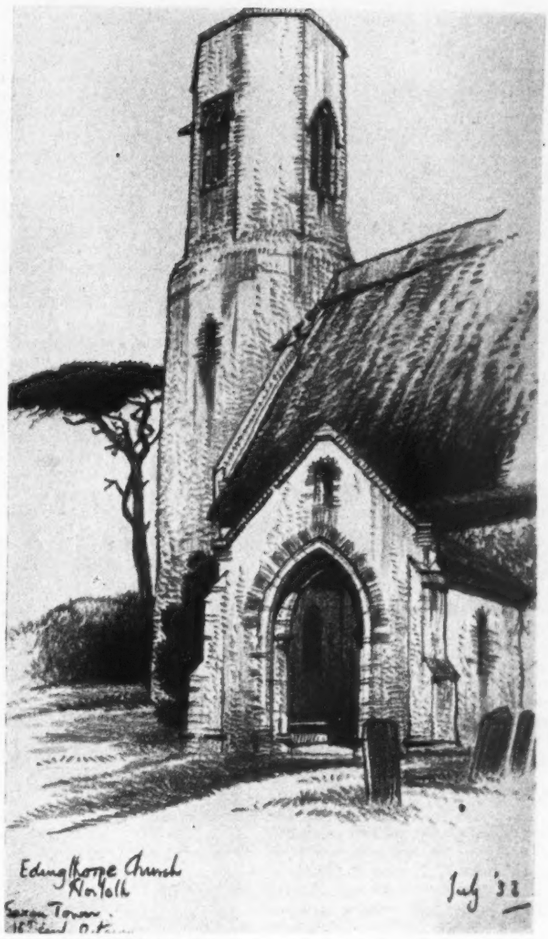
From the Exhibition at the A.A.

ELY.

From a Drawing by MR. R. MYERSCOUGH-WALKER, A.R.I.B.A.

(See Page 750.)

industry. He quotes Mr. Coppock's view that out of every £100 spent on building, over £80 is devoted "as wages in the building or the manufacturing trades or in transport or in salaries." Sir Francis Fremantle points out that the Trades Union leaders have naturally made the best of the demand for houses to get reduced hours and increased wages for the workers. As a result, the present hourly wage of the bricklayer, builder's labourer and painter shows an increase respectively of 78 per cent. 86 per cent. and nearly 100 per cent. above that of 1914. Proceeding, he says, "Seeing that the cost of living is now only 39 per cent. above that of 1914, there seems here a good case to be made out for some reduction of wage costs—a matter on which all parties, official and unofficial, employers and employed, and the whole house-reforming public, show an astonishing reticence. There is no occasion to blame the workers or their leaders. But there is surely no excuse for omitting so essential a factor in the quest for houses to let at the lowest possible rents. The building trades must look into it."




From the Exhibition at the A.A.

EDINGTHORPE CHURCH, NORFOLK: SAXON TOWER.

From a Drawing by MR. J. R. LEATHART, F.R.I.B.A.

(See page 750.)

**Replanning the Tower Area.**

WHAT is in essence a town-planning scheme for the Tower-hill area is contained in a project initiated by the Rev. P. B. Clayton, vicar of All Hallows, Barking-by-the-Tower. The main provisions of the scheme are (1) the removal of the great warehouse standing against All Hallows Church, to the west of the Tower, and the creation in its place of a public garden; (2) the removal of the building owned by the Underground on the south side of Byward-street, and (3) the demolition of the old West India Company's vaults in Cooper's-row and the laying out of a garden which would allow access to the old Roman Wall which lies behind the present old buildings on the site. The total area of open space released would be seven acres. It is stated that "the whole achievement would rescue from obliteration one of the most historic spots in the Empire, recover for the City its ancient pleasance, and provide a public promenade which would be second in interest and dignity to none in Europe." Another development that is visualised is that the Corporation of London should reclaim control of the area up to the ancient Roman wall, thus bringing Great Tower-hill as a whole within the City boundaries. The total cost of the scheme is put at £250,000. How greatly the execution of this plan would improve the area is obvious to the visitor to the Tower. The greater part of the west and north sides of the area are shrouded with a conglomeration of warehouse buildings. The great warehouse already referred to shuts out from the Hill All Hallows Church, and the removal of this and other buildings to the north would restore the dignity which this historic space has so largely lost.

**The Tower Palisades.**

THE suggestion has been made to us that, as an additional improvement, the wooden palisades on the site of the demolished Lion Tower might be replaced by "a more permanent barrier." Inquiry has elicited the fact that these palisades are upwards of fifty years old, and are not regarded as impermanent. Moreover, such palisades are a traditional form of barrier. Their replacement could only be by iron railings, which would be out of keeping with the tradition of an ancient fortress, or else by a rubble wall, which would cut off the view to the embankment and river.

**Rehousing London's Slum-Dwellers**

MR. H. R. SELLEY, chairman of the Housing Committee of the L.C.C., has made some interesting statements in an interview given to one of the London dailies. He is reported as saying that "if we clear two or three acres in Bethnal Green, Stepney or Shoreditch, we shall find that, with the normal type of five- or six-story block dwelling, we shall re-house only a little more than 50 per cent. of the number of persons displaced." This is a matter which, of all the problems related to London slum-clearance, is perhaps the most difficult. Under present conditions only two courses are available—(1) to rehouse the excess number of displaced tenants on adjacent sites, or (2) to rehouse them on outlying estates, such as Becontree. The first alternative has the demerit of requiring additional sites at heavy expense; the second, that of removing poorly-paid tenants to a considerable distance from their work.

**A New Scheme**

MR. H. R. SELLEY, therefore, is reported as suggesting the method of taller buildings. He proposes buildings of a limit of 10 stories, served by lifts, stopping only at two intermediate points. It may well be that such a solution will work out cheapest in the long run, but certainly the class of slum-dweller it is proposed to rehouse will not be able to pay anything approaching the economic rent. Figures of the comparative cost of five-story tenements and ten-story tenements equipped with lifts would be interesting.

# GENERAL NEWS

### An Architect's Estate.

Mr. John Hall, of Galashiels, architect (personal estate), left £18,586.

### The National Central Library.

The King and Queen on Tuesday visited the new headquarters of the National Central Library in Malet-place, W.C., where His Majesty performed the opening ceremony. The architect of the building, Mr. Hugh Gold, F.R.I.B.A., was presented to their Majesties. The building is the gift of the Carnegie United Kingdom Trustees.

### Proposed New Hotel, Liverpool.

Plans for the construction of a new Liverpool building, hotel and offices, to cost £500,000, representing land, building, and furnishing, have received the approval of the Liverpool Licensing Committee. The hotel will have frontage to Moorfields, Dale-street, and Eberle-street. The owners of the site are Exchange Properties, Ltd. The architect is Mr. A. Ernest Shennan, F.R.I.B.A., 14, North John-street, Liverpool.

### Appointments Vacant.

The post of County Architect to the West Suffolk C.C. is vacant, and applications are invited, by November 23. The salary offered is £400 per annum, rising in two years to £500, plus travelling allowance. Application forms are obtainable from the Clerk, Shire Hall, Bury St. Edmund's.

Applications are invited for the appointment of a temporary architectural assistant in the City Engineer's department, at a salary of £300. Applications must be sent to the City Engineer, Guildhall, Norwich, by November 27.

# COMPETITION NEWS

### Regulations for the Conduct of Architectural Competitions.

The following revisions in the Regulations for the Conduct of Architectural Competitions were provisionally approved by the Council of the R.I.B.A. on June 12 :—

(*a*) To add the following words to the first paragraph of clause 1 :—

"The promoters may, if thought desirable, appoint a representative to confer with the assessor or assessors during the progress of the competition."

(*b*) To amend clause 10 to read as follows :—

"In the case of limited or private competitions where the Royal Institute are satisfied that special circumstances may exist, modification of these regulations may be approved by the Royal Institute."

The comments received from members were duly considered by the Council at their meeting on October 23, when the amendments were formally ratified.

### Panel Designs.

The Council of the Manchester Society of Architects are holding a competition, open to Fellows and Associates of the Society, with a view to selecting eight members to act as a small Housing Panel as approved by the R.I.B.A. and the C.P.R.E. Mr. Adamson, Mr. Francis Jones, Mr. Hubert Worthington and Mr. Milner (Past President of the House Builders' Association) are organising the competition, and Mr. R. T. Longden (the initiator of the Longden Scheme), Mr. Noel Hill (the City Architect) and Mr. Milner will act as assessors. The object of the Panel is to provide, for speculative builders and others, designs for small houses at low scale fees, in order to assist in the preservation of the amenities of the countryside, and particularly to encourage those who would not otherwise employ an architect to have architectural guidance.

Designs for the following types of houses are invited :—

*TYPE A.—Semi-detached.*—Floor area inside the outer walls not to exceed 700 super feet on both floors inclusive. Accommodation—Ground floor : Hall with stair, living room, kitchenette, ventilated larder cupboard, coal store. First floor : Two (with alternative three) bedrooms, bath and w.c. (which may be combined). Bay windows optional.

*TYPE B 1.—Semi-detached, narrow fronted.*—Floor area inside the outer walls not to exceed 800 super feet on both floors inclusive. Accommodation—Ground floor : Hall with stair, parlour, living room, kitchenette, larder cupboard, coal store. First floor : Three bedrooms, bath, separate w.c. Note : A bay window is desirable. The living room may be to the front.

*TYPE B 2.—Semi-detached, wide fronted.*—Floor area inside the outer walls not to exceed 800 super feet on both floors inclusive. Accommodation—Ground floor : Hall with stair, parlour, through living room, kitchenette, ventilated larder cupboard and coal store. First floor : Three bedrooms, bath, separate w.c. Note : Bay window is desirable.

*TYPE C.*—Floor area inside the outer walls not to exceed 1,150 super feet inclusive. Accommodation—Ground floor : Hall with stair, lounge, dining room, separate kitchen, wash-house scullery, larder, fuel store. First floor : Four bedrooms, bathroom, separate w.c. Note : it should be shown how a garage could be added.

Designs are to be sent to the Hon. Secretary, Manchester Housing Panel Competition Committee, 178, Oxford Road, Manchester, not later than Friday, December 15.

# CORRESPONDENCE

### The Machine-Mad Age.

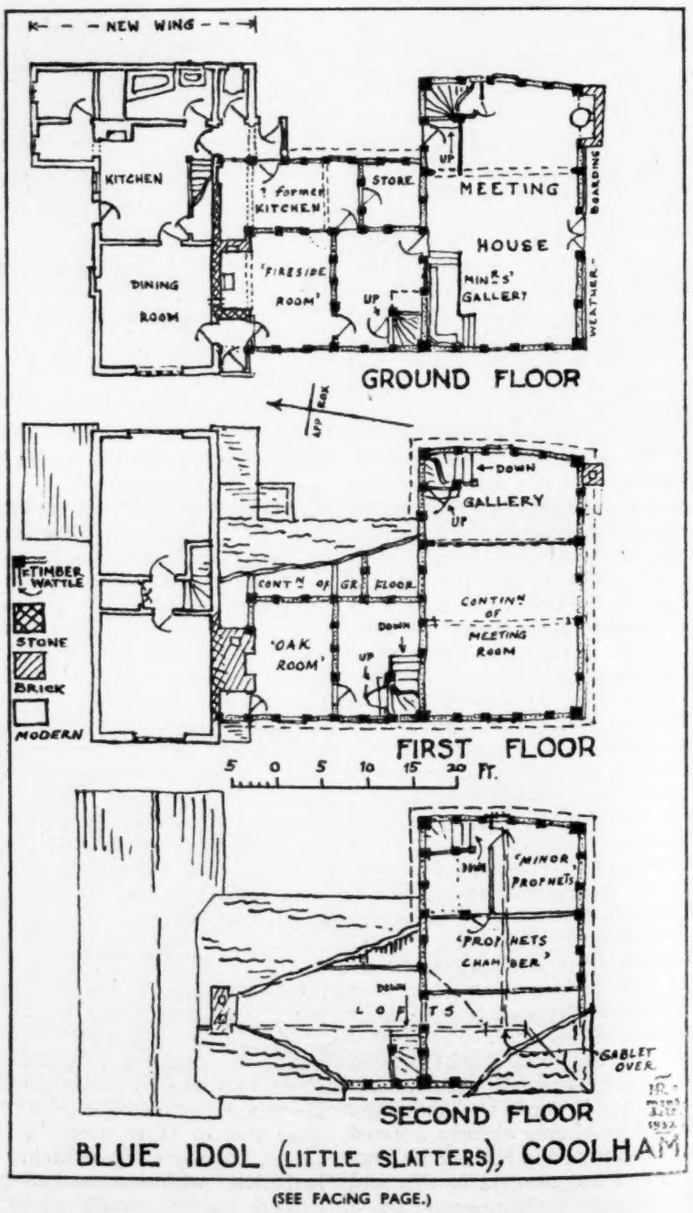
SIR,—Sir Giles Gilbert Scott, R.A., the President of the R.I.B.A., on Monday made an allusion to the "tyranny of the machine," and here struck a chord which should vibrate from pole to pole.

Without doubt, machinery is in a large measure a curse, though it is a blessing to humanity in some respects. We know that when in the dentist's chair the dexterous use of an exquisite machine helps him to relieve us from future pain. Several beneficent effects can be assigned to machinery—but many of us can only use our hands; we are endowed with these, if not with brains. Why should we be debarred from earning our livelihood by our hands? Is it not driving the unemployed to use these hands in a sinister way? "Satan finds mischief still for idle hands," and if hands are rendered idle by machinery, who cannot but sympathise with men who would, without the machine, be honest citizens?

A congress, with Sir Giles as president, might well be held during his presidency to discuss the whole subject.

It is a national and a world-wide cause.

EDWARD A. JOLLYE.




(SEE FACING PAGE.)

# SIXTEENTH-CENTURY RURAL DOMESTIC ARCHITECTURE

## THE "BLUE IDOL" (LITTLE SLATTERS), COOLHAM, SUSSEX.

THE subject of English domestic architecture, upon which so much has been written, perhaps still awaits systematic treatment from the social standpoint, distinguishing (for instance) manor houses, yeomen's houses, and villeins' or labourers' cottages by their size and treatment. Heath's "Homes of Other Days" gives a brief introduction to the subject from this standpoint. The example here illustrated, typical of many, but sufficiently intact to merit detailed treatment, appears to belong to the intermediate category. Situated in the hamlet of Coolham, south-west of Horsham, it is a good specimen of early timber-framed construction. Originally a private house, it has since 1691 incorporated a Quaker Meeting House (see plan). The present name "Blue Idol," of uncertain derivation, may be connected with a relatively modern internal distempering, still traceable.

The *plan* (see page 732) raises several interesting problems. The main axis is north-south, and there are end wings projecting eastward, one modern; the main wing is of two stories in its western part, but the floors seem to have been raised (the old beams having been removed), judging by their main joists resting on the older horizontals; this wing is divided by partitions which seem to be original. The south wing, or Meeting House, now resembles a "hall," for a first story in its eastern part forms a gallery, but the sawn-off joists and mortices show that the floor continued right along. The transformation has been attributed to the early Friends, but the gallery front (described below) seems somewhat earlier than their occupation, and the high second-story floor over is supported by ties, braces and posts reaching down both stories, which also seem more ancient—though the posts, from their awkward sitting on the sills, seem to be an insertion in the original structure. Another interesting feature is the provision of two staircases, which, though a second is now necessary for the isolated gallery, would not be needed when the floor was complete; there seem to have been two houses, and even to-day the upper floors do not connect, including in the modern wing. These two wings seem, also, to be of different date, judging from a blocked window between them, boarded on the Meeting House side, and from the difference of the framing; the southern wing has also a higher roof (Fig. 1).

The *construction* is of oak framing in approximately square panels (Figs. 1, 2), as usual in the sixteenth century, without the straight or curved braces common in some regions or the overhang of an earlier time; the filling is wattle, with later brickwork near the ground, and the main studs and bressummers are about 15 in. The floorboards are about 12 in. wide in the south wing and narrower in the main portion. The footings are of Horsham stone, laid roughly (see Innocent, "Development of English Building Construction," p. 118), as are the chimney breasts, and the roof is of the same picturesque material; it descends to first-floor level on the east side. Early thin brickwork occurs in footings and chimney-stacks, and the later type in the chimney-recess. The south end has been weather-boarded.

The *features* may be briefly dismissed. In the Meeting-house there are three pieces of dateable panelling: (1) The partition formerly under the gallery, of bevelled boarding between vertical studs, probably early sixteenth century; (2) an oak settle of mason's mitre type, probably the same; (3) the gallery front, with mitred panel surrounds—but these are planted on boards which form the panels—perhaps seventeenth century. The gallery has an applied moulded cornice and base, probably of the same date. The staircases are of the spiral or newel type enclosed in a square space, with square centre-post—a type intermediate between the pure spiral

FIG. 2.—EAST SIDE AND SOUTH WING, FROM NORTH.

mediæval type and the straight-flight-with-landing type developed during the sixteenth century, and perhaps anterior to the transition from the solid-square-core type (Canonbury) to the open well of the late sixteenth century. Treads and risers are separately wrought—a development from the mediæval solid step, but cf. a mediæval example, which seems to be built up in the same way (Ormskirk, in Godfrey, "The English Staircase," pl. ii). Each flight has a door at the foot. Two newel-posts or terminals exist in the southern staircase, which are almost the only decorative details in the building—low squared posts each crowned by a cube chamfered off to a 14-sided figure—a charming piece of inventive craftsmanship. The doorways are mainly original (except at the south end)—two-ledged and large-battened examples, with several examples of the latch raised by a leather thong, recorded in the early sixteenth century and "still found in places" (Innocent, p. 237; Garner and Stratton, "Domestic Architecture of the Tudor Period," ii, Fig. 336 on p. 234). Several early windows on the east side fortunately remain (Fig. 2, on right)—side-hung, with diamond leading, an early fastener, and some original glazing, a type which continued in use down to the seventeenth century "in less exposed positions" (Innocent, pp. 256-7). The west window of the Meeting House (Fig. 1) is of late seventeenth-century type and is probably due to the Friends; it retains a little early glass. In the great fireplace recess the hood has been modernised, but the breasts are original and pierced by a small square aperture. The florid Sussex fireback is of a later or Dutch type. In the Meeting House is some boarding with ventilation holes, half hidden by the gallery-support. The roof, but for a few ties, has been modernised. The fittings are simple, including the "Ministers' Gallery" and benches in the Meeting House, an oak "joint-stool" of the seventeenth century, and a small elbowed bench reminiscent of Tudor work. The barn (Fig. 3) has its east end nearly intact, resembling the main building but with diagonal braces and an unglazed window with diagonally-planned oak mullions, as was once common (Innocent, p. 259, and Fig. 71 on p. 258).

FIG 3.—THE BARN.

The *chronology* would thus apparently be: Wings built both in the sixteenth century, but with some years' interval (perhaps respectively early and middle), and the barn; gallery formed by the removal of part of floor, and floor inserted in main wing, perhaps late sixteenth or seventeenth century; Friends' occupation, 1691; 1893 and 1931, modern additions, suitably in keeping without deceptive imitation, and made without piercing the upper walls or other interference with early work, the old kitchen door and window having been carefully retained. Its present trustees (the local Society of Friends) and its resident guardians are zealous for its preservation, and to the courtesy of the late wardens (Mr. and Mrs. Barritt) the exploration by the writer is due. Standing in unspoilt rural surroundings, its present use as a Rest House makes noble use of its charm and beauty.

H. V. MOLESWORTH ROBERTS.

[Photos by W. J. Drewett, of Steyning.]

FIG. 1.—THE "BLUE IDOL," COOLHAM, FROM THE SOUTH-WEST.

## INAUGURAL ADDRESS.

THE opening meeting of the R.I.B.A. new session was held at 9, Conduit-street, W., on Monday evening last, when Sir Giles Gilbert Scott, R.A., delivered his inaugural address. He said that about the year 1866 his grandfather wrote that a constant agitation was going on at the Institute of British Architects upon the periodical election of their President. The Gothic men went in for Beresford Hope, but were twice defeated —once by Professor Donaldson and once by Mr. Tite; at length, however, the hopes of Hope were realised, and he became President. After Mr. Hope, Mr. Tite had a second innings, and then the Council, in 1870, elected his (the speaker's) grandfather as their nominee. He, however, declined to stand, feeling that his extensive engagements and the claim of his family upon his spare time forbade it. He stated also that he felt he was not by nature fitted for such a post. He (the speaker) might have written those lines himself. However, a few years later, in 1873, he (the speaker's grandfather) was seated in that chair delivering his inaugural address, and on the list of Past-Presidents in the adjoining room appeared the name "Sir G. G. Scott, R.A., 1873-6"—what confusion for the future chronicler, who found that this same fellow, Sir G. G. Scott, R.A., was again elected President in 1933, exactly 60 years later!

In his grandfather's time the fight between the Gothic and Classic schools was fierce and relentless, and seemed even to have influenced the Presidential election, the issue being decided by the style of architecture practised by the candidates. His (the speaker's) own fate under such conditions was too bewildering to contemplate, for in architectural style he feared he resembled Henry VIII, with his incorrigible proclivities for chopping and changing!

The fierce fight of his grandfather's time was conducted with as much vigour as, if not more than, the present issue of Traditionalism and Modernism. Pugin was one of the first to start the racket, and his (the speaker's) grandfather, writing of the enthusiasm engendered by what he described as the thunder of Pugin's writings, said :—

> "I was from that moment a new man, old things had become new, or rather modernism had passed away from me, and every aspiration of my heart had become mediæval."

How curiously that read in these times—"modernism had passed away from me, and every aspiration of my heart had become mediæval"; thus did the pendulum swing violently over from side to side. The swing of the pendulum, action and reaction, balance of opposites, would form the basis of his superficial and somewhat disjointed observations that evening. It was not a profound thought that nature kept a middle line by the clash of opposites and the balance of opposing forces; examples of that apparently fundamental natural law were found everywhere. In the animal world we found that animals endowed with means of attack were countered by their prey being endowed with means of escape from attack. In human affairs we found extremists in strong opposition, all busy in cancelling each other out and preserving nature's great game of balance. In architecture, he thought this was a consoling thought that extreme Traditionalists and extreme Modernists were serving a useful purpose in cancelling each other out!

He once asked the late Mr. Napier Henry, the marine painter, how he got the brilliant sparkling greys that he used so largely in his skies. His answer surprised him (the speaker); a mixture, he said, of crimson lake, Hooker's green and white—this clash of opposites producing a splendid neutral, fresh and brilliant, with a quality that could never be obtained by mixing drab and neutral tints.

### Unintelligent Traditionalism.

At present we were experiencing a violent reaction from unintelligent Traditionalism; architects had for years indulged in academic revivals of past styles and had become so engrossed in these exercises that architecture was becoming largely divorced from the practical side of modern life. Industrialists and practical business men had little or no use for architects, who came to be looked upon as purveyors of ornament and therefore not required on industrial buildings, that needed above all to be practical, efficient and inexpensive, with the possible exception of the head office in some city street, where certain conventions had to be observed. Commercial buildings, factories, power stations, etc., were erected throughout the country without the aid of architects.

The reputation that architects had acquired was to a certain extent undeserved, for the profession had always had a number of fine planners and level-headed men of vision, who could have directed industrial building on sound economical lines and by their contribution of simple, direct planning, increased the efficiency of such buildings and, at the same time, saved England from at least some portion of its terrible legacy of ugliness and muddle. But in spite of this there was no doubt that academic exercise in various traditional styles was carried to excess; buildings were looked upon as opportunity for stylistic embellishments and great enthusiasm was devoted to that display. The result in most buildings was too much superficial style and too little real architectural building. He could not help thinking that the neglect of architects by industrialists might have been largely due to that. Be that as it might, the state of affairs became intolerable when about 90 per cent. of the buildings erected in this country were put up by men who were not architects and who knew nothing and cared nothing for the appearance of those buildings, while the men who were trained to "design in beauty and build in truth" were left to control only a miserable fraction of the building activities of the country.

If it was concern for stylistic beauty at the expense of truth that brought that about, the modern movement was setting out to remedy matters by going to the opposite extreme. The reaction had come, the pendulum swung violently over and, as usual, swung too far—the motto was now "build in truth and let beauty take care of itself." The cry of the extremists was heard on all sides—away with tradition, away with ornament, away with everything save grim, stark functionalism. Buildings must become machines, they must be built by machines, they must look like machines, they must function like machines. Why was it so difficult to remedy a defect without going too far? Extremes were always wrong in themselves, yet we found it difficult to resist the pleasure of indulging in them; they were so stimulating and exciting and well suited to these fast and restless times.

Now this craving for the machine ideal showed signs of being seriously overdone. That it should have arisen at all was not surprising, for there was one peculiar feature of the age in which we lived that made it stand out from all previous ages in the history of the world. He referred to the amazing development of machinery. Many civilisations had come and gone, and in their main characteristics they differed little one from another, but modern civilisation stood out in this one respect completely different from any of its predecessors: mechanical science had rendered this age unique. From our days in the nursery when we played with engines and mechanical toys, we became impregnated with a machine complex. Was it surprising that we were now trying to develop the arts in terms of the machine? This was a machine age, and architects and, indeed, all artists were being told to recognise that fact.

Architecture, dealing with abstract form, lent itself readily to this machine influence, but in the other arts there was the same tendency to introduce something that suggested machinery; even in painting and sculpture, figures were made to suggest mechanical robots, with arms and legs resembling metal tubes, and with angular and metallic looking bodies. In painting, the shadows and shading suggested the effect of light on metal surfaces.

Music had its mechanical characteristics, and modernist architecture drew its inspiration from aeroplanes, ocean liners and motor cars, and houses were talked of as machines to live in. While some architects attempted to justify their admiration of machinery by pointing to the beauty of many modern machines, they ignored the undoubted fact that in many cases mechanical engineers did consciously endeavour to improve the appearance of their machines. The railway locomotive, the ocean liner, the motor car, were all designed with an eye to line. He was once discussing with an eminent naval architect the fine lines of the great German liner *Bremen*, and he asked how it was that there were so many fine lines in that ship; was it pure functionalism that produced them? The naval architect replied that the Germans worked much more by eye in these matters than English engineers, and that when the essentials were satisfied there still remained considerable scope for variations, and it was here that beauty of line could be indulged in without impairing efficiency. There was also the well-known example of the Forth Bridge, where the engineer adopted a particular shape for the great trusses, not because it was the more efficient but because he considered the appearance was more satisfactory than several other alternatives. The motor car also contained obvious padding for effect, the untidy engine being concealed under a bonnet designed to give a good line.

But to return to architecture, Mr. Eric Gill demanded honest machine-made buildings, for, as he said: "In a machine-run civilisation, the place for hand-made things is the museum of curiosities." Let us, he said, face the fact and be proud of our machinery instead of being ashamed of it. Well, he (the speaker) could not help feeling that we were all going machine mad—"Let us be proud of our machinery," let us make it do everything that we now did with our hands. Could not some mechanical genius discover the correct juxtaposition of cog-wheels, pipes and pistons that would give us a machine that by pressing a knob would produce for us fine sculpture and fine painting, for in a machine-run civilisation the place for hand-made things was the museum of curiosities.

This machine mania led to curious anomalies. He learnt from a large firm of metalworkers that a machine technique was now often required for specially designed work, but the size of the order, which was not sufficient to justify mass production, rendered the laying down of special machinery for it quite uneconomical, and it was therefore necessary to do the work by hand but to make it look as if turned out by a machine—a difficult and expensive process. This showed that the modernist crank could be as stupid as the old "art and crafty" crank, who applied hammer marks to machine-made goods.

Where was this worship of the machine tending to lead us? Already we heard the first rumblings of discontent and disillusion; unemployment seemed worse in those countries employing most machinery, and unless science, which had devoted so much thought to production, turned its attention to consumption in order to adjust the balance, we should find that as that tendency increased to make the machine do all the work of our hands, discontent would increase and eventually give way to anger. Unless this indis-

criminate development was checked, he visualised the revolution of the future as being directed not against governments or men but against the tyranny of the machine.

At first he saw the advocates of machinery puzzled and anxious and the masses restive and querulous; gradually the wave of discontent swelled into a vast tidal wave, which broke at last in a wild fury of destruction. He saw crowds marching on the factories, breaking up the machines, many being electrocuted or scalded to death in the wild orgy of destruction. Then, as an epilogue, he saw the people back to a simpler and more human ideal, living hard-working, simple but contented lives. He made a present of that idea to some film producer!

### "Beware of Machinery."

"Let us be proud of our machinery." He wondered! Let us rather *beware* of our machinery. There were architects who were waxing enthusiastic over the machinery ideal, when political economists were beginning to have doubts. What was the lesson we were going to be taught in this matter? Just the same old lessons that human beings were always learning yet never learnt—to preserve a balance and avoid extremes. "Do not," said the speaker, "allow extremists to go further than is necessary to cancel out their opposites." The machine ideal would undoubtedly fail if carried too far. The human element would put up with a certain amount of suppression until the suppression became intolerable; then would come the violent reaction and we should see a return to the primitive handicrafts, and that movement, in its turn, would probably be carried to ridiculous extremes.

Was this the significance of architectural development in Germany at the present time? The Modernist movement, with its grim so-called functionalism, had had a good innings in Germany and the reaction seemed to be sweeping it away; the cry there for a more human, romantic, or mediæval ideal brought back the words of his grandfather, "modernism had passed away from me and every aspiration of my heart had become mediæval."

He would not labour the point that he was endeavouring to make, but the moral of all that seemed to him: Avoid extremes and preserve a sane and balanced judgment. He agreed that to keep a middle line without becoming dull and lifeless was very difficult, and he might be pleading a cause that was not sufficiently exciting for some, yet he would say that the greatest artists were those who, though capable of going to extremes, studiously avoided doing so; a fine work of art should be nervous but serene, it should be full of life but not hysterical, and it should be restrained and controlled, yet free. It contained, in fact, a number of delicate balances, the balance found in Nature. But in Art, the struggle of opposites and the resulting delicate nervous poise between extremes must be fought out in a single individual—the artist. In this controlled exuberance lay the great difficulty of Art. Those of them who played golf would understand him when he said that he found the same thing applied to that exasperating game, controlled exuberance, restraint combined with freedom—it was, indeed, a difficult balance of opposites. It was why great artists were so rare and so many of them such rotten golfers!

He had touched upon some aspects of Traditionalism and Modernism. He held no brief either for the extreme diehard Traditionalist or the extreme Modernist, and it seemed to him idle to compare styles and say that one was better than another. The old fight of his grandfather's time between Gothic and Classic and the present fight between Traditionalism and Modernism seemed to him issues not worth spilling ink over, but what we did need was a common agreement to use only one style and one style only; the value of a style did not lie so much in the style itself, the same fine fundamental qualities could be found in all styles, but it did lie in the binding effect it exercised upon a number of individuals. There was no doubt that the great achievements of the past, both in Art and Science, had been attained by a large number of individuals all thinking on the same lines and each making his own small contribution to the gradual evolution of a common aim. This gradual development, extending over a long period of time, led to a very high level of achievement. The development of machinery provided a good example of that cumulative thinking.

"Go into the engine-room of a large liner and look at the vast mass of amazingly complex and intricate machinery," said the speaker; this could never have been conceived by one or even several individuals; it was the result of gradual development, the result of group thinking extending over a considerable period of time, each generation contributing some improvement to what was originally a simple and primitive contraption.

The same process had occurred in the evolution of past architectural styles; the value of style lay in its binding effect, enabling a large group of human beings to develop a common line of thought, and the gradual evolution this achieved produced a quality and depth that could not have been attained in any other way.

SIR GILES GILBERT SCOTT, R.A., P.R.I.B.A., UNVEILING THE PORTRAIT OF HIS PREDECESSOR, SIR RAYMOND UNWIN, AT THE ROYAL INSTITUTE, ON MONDAY. THE PORTRAIT IS BY SIR GEORGE CLAUSEN, R.A.

### Evolution—Not Revolution.

The perfection of Greek architecture was undoubtedly due to the very slow evolution of a single style. It was remarkable how small a change took place in the main lines and style of a Greek temple during a period extending over a number of centuries; the creative energy of generations was lavished upon subtleties, refinements and improvements of an accepted style and not devoted to the invention of a new one. He would feel happier about the future of architecture had the best ideas of Modernism been grafted upon the best traditions of the past, in other words, if Modernism had come by evolution rather than by revolution.

Like all sudden and extreme changes of human endeavour, it suffered at first from a certain shallowness and superficiality; it lacked quality, which he contended could only come by gradual evolution; but in spite of this it had brought a breath of fresh air into a somewhat fetid atmosphere, it had cleared away a lot of cobwebs, and its negative quality of utter simplicity was, he felt, a healthy reaction. Would it be given time to develop into something fine? Or would the restlessness of modern times view such a gradual development with impatience and switch off to something else before anything had been achieved? In the extreme expression of Modernism lay its greatest danger; the inevitable reaction would sweep it away.

He would say, therefore, that its extreme exponents were its greatest enemies. There was a lot of functional nonsense about extreme Modernism; though logical expression of material was claimed as one of its fundamental principles, we nevertheless found that buildings were designed to look as if they were of reinforced concrete, even when they were nothing of the sort; cantilevers and large spans were adopted for obtaining striking effects when it would be more economical and easier to use some more ordinary arrangement. Long horizontal bands of glass with no apparent vertical supports were not functionalism or true expression of construction; the law of gravity being what it was, verticals could not be eliminated, and this fact should be accepted and not artfully concealed for the sake of obtaining a striking effect. One of the methods adopted in factories for concealing the essential vertical supports was to put them back some feet from the walls and let them obstruct the floor space where it was best lighted and most valuable; the functionalist argument was that the columns had not been set back, but that the walls had been put forward on cantilevers, thereby increasing the floor area, but one wondered why the columns were not brought forward also, so as to prevent their obstructing this increased floor area. No! he was afraid it was a craving for a striking effect rather than for functionalism expressing construction that led the extreme modernist to tell the same constructional lies that he condemned so heartily in the work of the extreme traditionalist.

Modernist work demanded a super finish, or machine finish, yet, owing to expense, this could rarely be afforded, and, as a consequence, a great deal of this work had a shoddy character and as the newness and freshness wore off, took on an appearance peculiarly dismal and depressing.

Still, it was easy to criticise and to pick out the more obvious weakness in that style, or lack of style, but nevertheless he thought it would be a serious loss to architectural development if it were swept completely away in a violent reaction. He doubted if it could be so completely wiped out as to leave no trace of its influence behind. He wanted to see its best features and characteristics retained and grafted at first on to the traditions of the past, and then gradually developed not by a group but by all architects in the country, working together on the same lines; only in that way could we build up a style worthy of the name, and only by such a process of gradual evolution, developed by a great number of individuals, could we attain a quality that would enable us to produce a style worthy to compare with the styles of the past. Let us avoid being extreme, even if it did in these vulgar days pay to be sensational; let us

beware of too much machinery, and let us aim at quality rather than novelty, so that we might produce buildings that were not only efficient, practical and functional, but also refined and beautiful.

### Discussion.

The Earl of Crawford and Balcarres, proposing a vote of thanks, said that the address struck him as being the embodiment of the spirit of architecture, full of wisdom and enlivened by humour. Profound in its analysis and high in its aspirations, the address deserved every praise; it would be the more striking the more carefully it was studied. Nothing could have been more interesting than the President's statement regarding the balance required between traditionalism and modernism. He (the speaker) had great respect for modernism—provided he were allowed to choose his exponent. Of these exponents Sir Giles came easily first. For it became more impressed upon him (the speaker) that the chief function of the modernist was the power to arouse excitement, and he was more excited by a cathedral or a power station than by any house of glass and aluminium. But the President clearly regarded the contest between tradition and the modern as being, on the whole, wholesome and profitable, for progress was arrived at by a process of antagonism, and Sir Giles had pointed out that nature maintains the middle course by balancing opposing forces.

The Rt. Hon. W. G. A. Ormsby-Gore (First Commissioner of Works), in seconding the vote, said that life to-day was highly individualistic, with the result that there was an undue reaction against individualism. Style was the result of the individualism of great artists. The great thing in the history of art was the history of the great individualists. There would be a new style to-day when there was a new Inigo Jones. The outcome to-day was the glorification of the machine. There the artist came in. The essential mission of the architect should be to ensure that the artistic element came in on top of the engineer. Were buildings, in short, to be purely engineering creations, or were we to have a conscious artistic element? As long as the latter quality was present in building, architecture—the foundation of the visual arts—would remain the master art.

Sir Herbert Baker, R.A., supporting the vote, referred to the happiness all felt that Sir Giles had accepted the arduous task of Presidency. As to the paper, one of the brightest truths was that modernism was all very well if one remembered that progress should be by evolution—not revolution. There was only one solution—to have a high ideal. Because they felt that Sir Giles had that ideal, they were acclaiming that night his high service to the Institute.

The vote of thanks was heartily accorded, and the President briefly responded, saying that his task was greatly helped by the general help and encouragement he received. Replying to points raised, he said that, as regarded individualism, it was a question of freedom within limits. Genius, in his opinion, was not revolutionary. The genius worked in the same style as the rest, but he did it better than anyone else. To-day we wanted quality, and we could get it only by collective and grouped thinking.

### The Past President's Portrait.

Sir Giles Scott then unveiled the portrait by Sir George Clausen, of Sir Raymond Unwin. Sir Raymond's profound knowledge of town planning and international reputation had, said the President, enabled him to bring credit to the Institute, on which he had left his mark.

# ILLUSTRATIONS

## PLATES.

### St. Mary Redcliffe, Bristol.

To mark the restoration of St. Mary Redcliffe Church, Bristol, a festival of thanksgiving was held on November 3, in which the Archbishop of Canterbury and eight Bishops took part. The church dates back to the twelfth century, but of the original building only the north porch remains. The present restoration was made possible by Lord Dulverton, who has borne the cost, amounting to £85,000, of repairing the exterior of the fabric, while the Canynges Society provided the funds for renovating the interior. The clerk of works was Mr. John W. Hopkins; the contractor, Mr. F. N. Cowlin; and the architect, Sir George Oatley, F.R.I.B.A.. The drawing reproduced on our frontispiece is by Mr. A. C. Fare, R.W.A., A.R.I.B.A.

### Church of Our Lady and St. Hubert, Oldbury, Birmingham.

This church, which is being erected at the junction of Wolverhampton and Bleak Houseroads, is planned to seat about 500 people. The materials are Messrs. Blockley's brown and purple bricks laid one course of 3 in. headers to four courses of 2 in., built garden wall bond with wide joints and with a certain amount of Hollington stone for string courses, carving, etc. The roof is of Westmorland green slates. Internally, the treatment is rough plaster walls, and blue Hornton stone for piers and altar, etc. The roof is of ordinary queen post design. The flooring is of wood block generally, the aisles being in stone and slate.

Messrs. W. J. Whittall and Son, of Birmingham, are the builders; Messrs. Wontner Smith, Gray and Co., the heating engineers; and Messrs. Gornall and Co., are responsible for the electric light work, and Messrs. R. E. Pearse and Co., for the glazing.

Mr. George Drysdale, F.R.I.B.A. (of Messrs. Leonard Stokes and Drysdale), is the architect.

### Frances Gray House, Stepney, E.

This building, which has been erected for the Stepney Housing Trust, Ltd., was completed early in January this year, and was officially opened by the Duchess of York on March 23.

The general contractors were Messrs. Harry Neal, Ltd. Among the artists, craftsmen and sub-contractors were the following: Greenham Demolition Co., Ltd., demolition; Thomas Lawrence and Sons, bricks; H. J. Major and Co., tiles; Salter Edwards, asphalt; General Iron Foundry Co., Ltd., metal gate; the Kleine Co., Ltd., floors generally and balcony; Moreland, Hayne and Co., Ltd., steelwork; the Trussed Concrete Steel Co., Ltd., reinforced concrete foundations; Newalls Acoustic Products, Ltd., sound proofing of one flat, as experiment; Wing and Webb, door and window furniture; G. A. Harvey and Co., dustbins; Metropolitan Borough of Stepney Electricity Supply Co., electric wiring, etc.; Birmingham Guild, Ltd., lettering in front; John Lewis and Co., dressers in kitchens and drying racks; the Commercial Gas Co., Stepney, gas supply, etc.; Walpamur Co., Ltd., interior decoration; New Devices, Ltd., valves between copper and bath; Bratt, Colbran and Co., bedroom fireplaces; Smith and Wellstood, Ltd., living room ranges; Empire Stone Co., Ltd., coping stone; John Bolding and Son, Ltd., sanitary fittings; Henry Hope and Sons, Ltd., metal windows.

Messrs. Mitchell & Bridgwater, A.R.I.B.A., are the architects.

### New Buildings at Bedford School.

The large corrugated iron building, familiarly known as the "tin building," which has served Bedford School as laboratories and gymnasium for over half a century, has at last been demolished. To replace this new buildings have been designed by Oswald P. Milne, F.R.I.B.A., an Old Boy of the school.

A science block has been placed near the Glebe-road entrance gates, combining physics and chemistry laboratories, classrooms and a lecture theatre. It is built of local red bricks with stone dressings, and is roofed with red hand-made tiles. The foundation stone was laid by Dr. W. Langdon Brown, O.B. Regius Professor of Physics at Cambridge, on October 29, 1932.

The main front of the building faces the school field, and towards the Burnaby-road gates. At one end of the building on the wall is a big clock, and at the other a sundial, both being carried out in burnished metal. The weather vane, which is placed centrally on the roof of the building, represents a retort. Over the main entrance door, which is flanked by stone pilasters, is a carved wood panel with gold enrichments, upon which is the following extract from Ecclesiasticus: "There are yet hid greater things than these be, for we have seen but a few of His works." On the ground floor are placed the physics laboratories and two classrooms. On the first floor are the chemistry laboratories and a lecture theatre.

The whole of the internal walls are faced with cream sand-lime bricks, the doors being blue. The floors of the laboratories are in red jarrah wood, whilst those of the corridors and staircase are in Sienna terrazzo. The electric light fittings are simple and modern. On the staircase are two decorative panels, one an aerial view of the school grounds and buildings, the other a map of Bedford and the surrounding country; these have been designed by G. Spenser Hoffman.

The lecture theatre will seat 150 boys, and is equipped with a cinematograph apparatus. The laboratory fittings are made of Columbian pine, stained silver grey with ebonised handles and bases.

An arcaded wall connects the science building to the main school. In this wall occur the Glebe-road entrance gates, which are being made in wrought-iron work by the boys in the school workshops. Carved panels in stone depicting the school eagle and coloured in blue and gold are in the gate piers. These were carved by Esmond Burton. On the other side of the Glebe-road entrance is the new headquarters of the Bedford School Officers' Training Corps.

The new gymnasium is built near the swimming pool, and with it forms the western boundary of the playing fields on the south side of the school. Like the science block this building is of red bricks with a roof of red tiles.

The main gymnasium measures 80 ft. by 40 ft., while there is a large gallery which, as well as forming a vantage point for spectators, serves as a smaller gymnasium for boxing and physical exercises. The lighting and ventilation have been carefully studied, and an interesting feature is the very large southern window which, being glazed with "Vita" glass, admits the ultra violet rays of the sun.

The floor is carried out in narrow strips of Bagac wood, which is particularly suitable for gymnasium work, as it does not splinter or become slippery. The equipment is all thoroughly up-to-date, and includes a moveable boxing ring, made specially for the school by the Army boxing instructor at Aldershot.

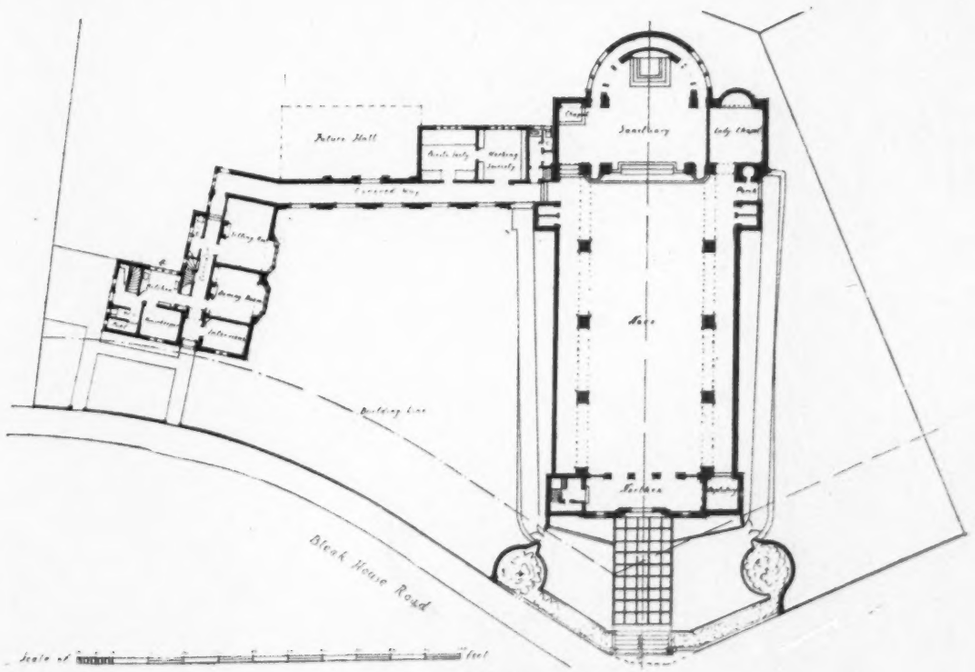
The general colour scheme of the gymnasium is attractive and interesting. The walls are of sand lime bricks, cream coloured, while the iron principals of the roof are painted the school blue. The gymnasium is well equipped with changing rooms, shower baths, etc. Both the science building and gymnasium have been carried out by Messrs. S. Foster, Ltd., of Kempston, Bedford, under Mr. Milne's supervision.

The sub-contractors employed on the science block were as follows: Aston Construction Co., steelwork; Tyler and Freeman, electrical work; Benham and Sons, heating; Williams and Williams, metal windows; Jenkins and Sons, Torquay, terrazzo flooring; Acme Flooring Co., wood flooring; C. Franklin, Bedford, external bricks; Grovebury Brick Works, Bedfordshire, internal bricks; Educational Supply Co., Stevenage, Herts, laboratory fitting; Caxton Flooring Co., fireproof floors; Comyn Ching and Co., ironmongery; Tucker and Edgar, clock and sundial; Synclocks, Ltd., Hendon, clock mechanism. The sub-contractors employed on the gymnasium were as follows: Aston Construction Co., steelwork; H. Bacchus, Bedford, electrical work and heating; Williams and Williams, metal windows; Acme Flooring Co., wood

(*Continued on page* 751.)

R.A. EXHIBITION, 1933.

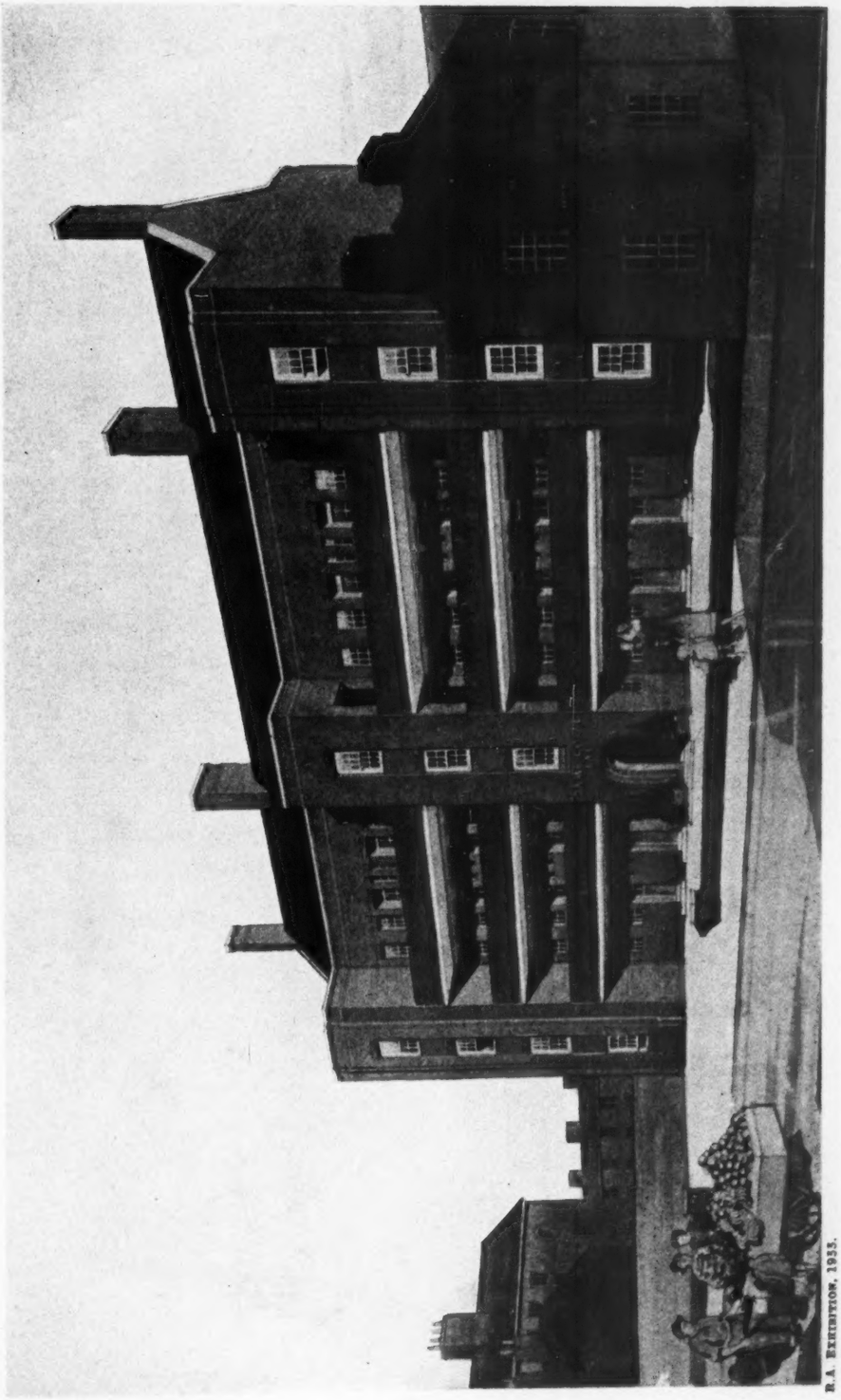
VIEW FROM SOUTH-WEST.




GROUND PLAN.

CHURCH OF OUR LADY AND ST. HUBERT, OLDBURY, BIRMINGHAM.

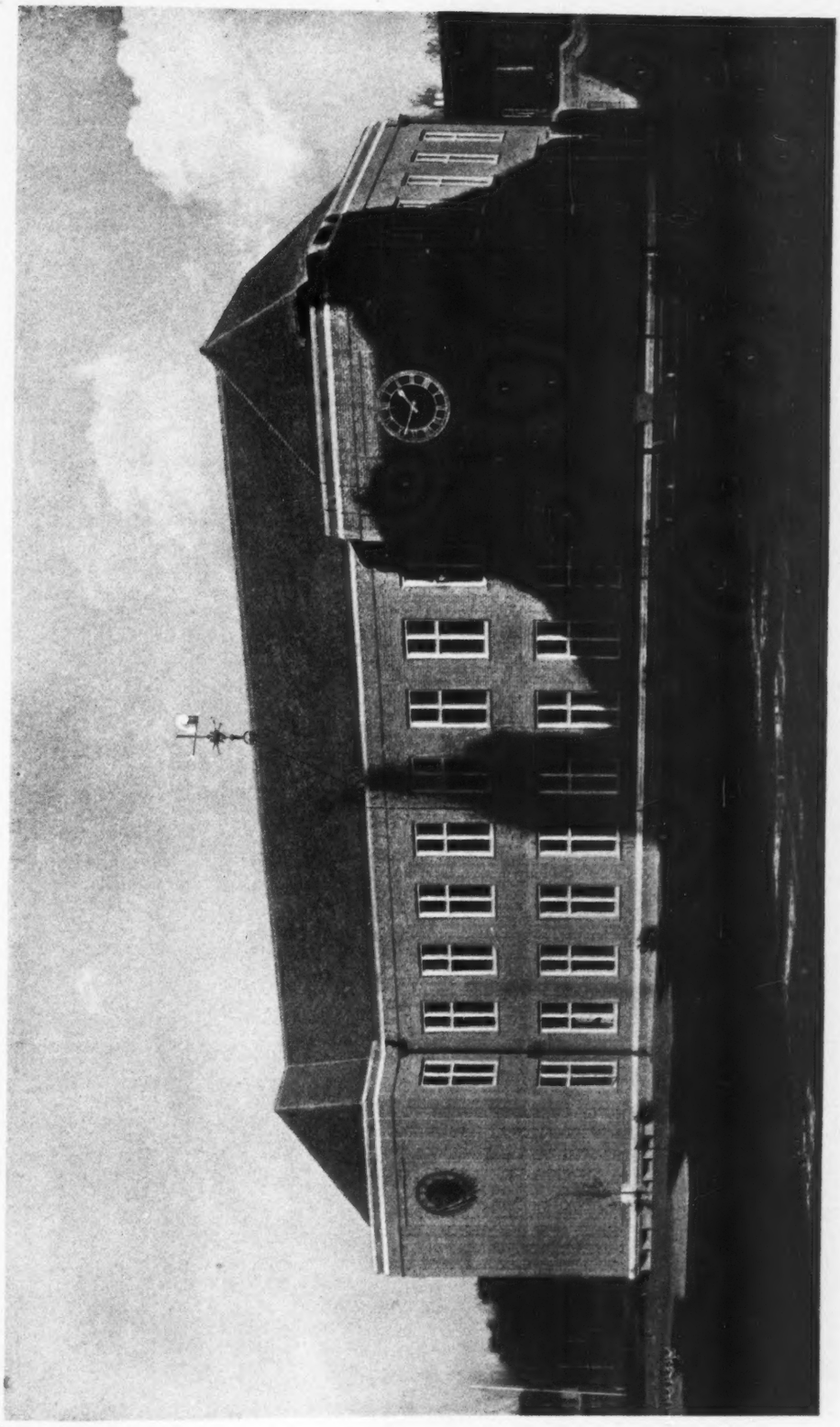
MR. GEORGE DRYSDALE, F.R.I.B.A. (MESSRS. LEONARD, STOKES AND DRYSDALE), Architect.



R.A. Exhibition, 1933.

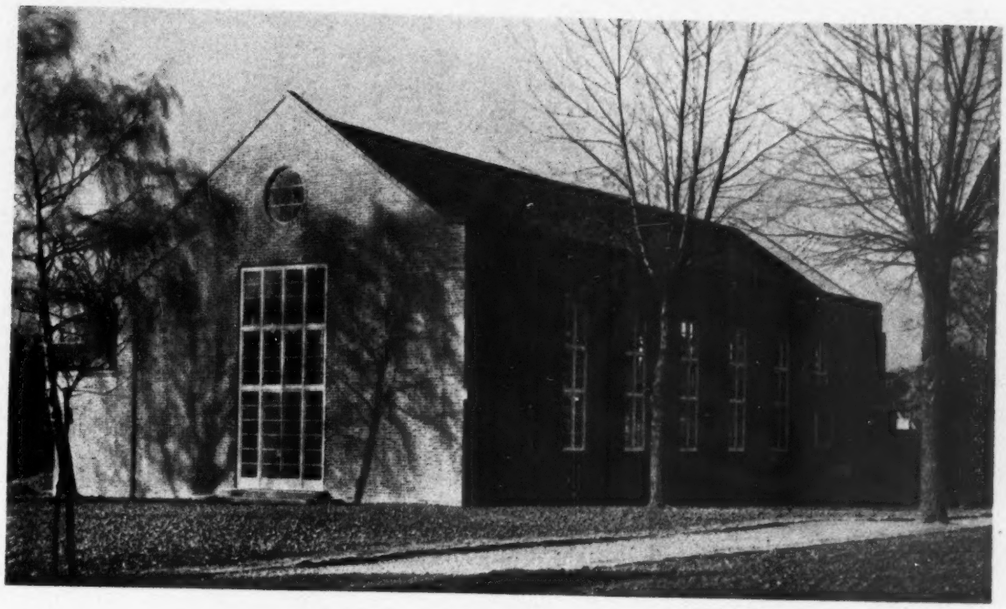
FRANCES GRAY HOUSE, STEPNEY, E.

MESSRS. MITCHELL AND BRIDGWATER, AA.R.I.B.A., Architects.

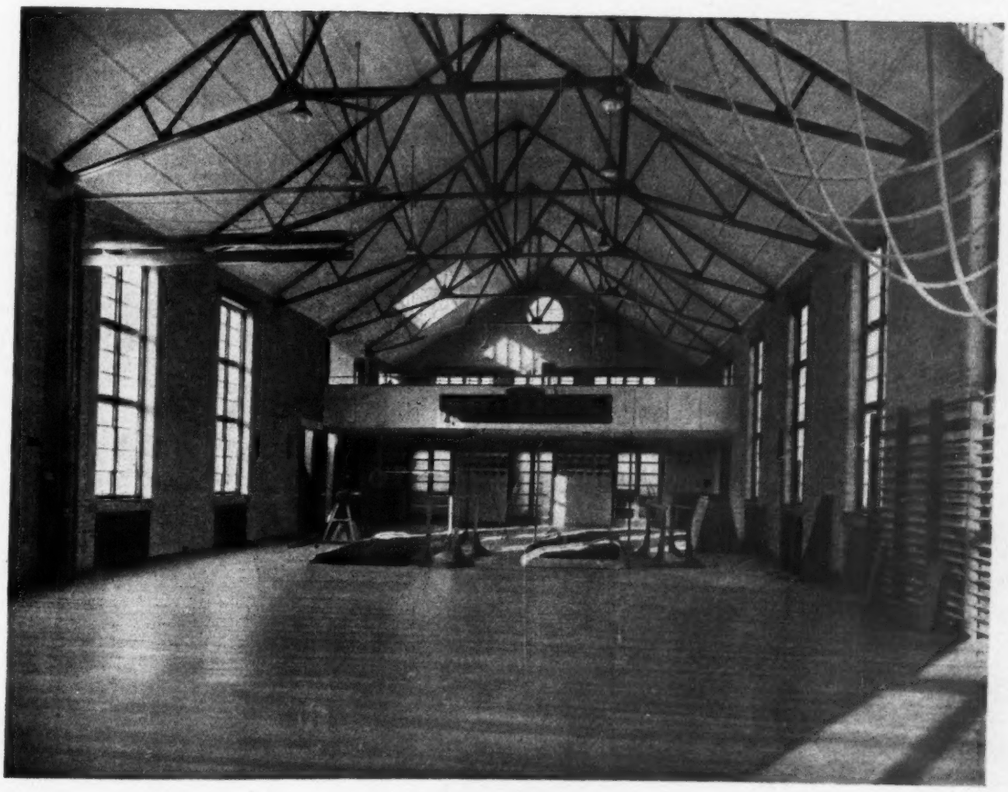


NEW SCIENCE BLOCK, BEDFORD SCHOOL, BEDFORD.

MR. OSWALD P. MILNE, F.R.I.B.A., Architect.



EXTERIOR.

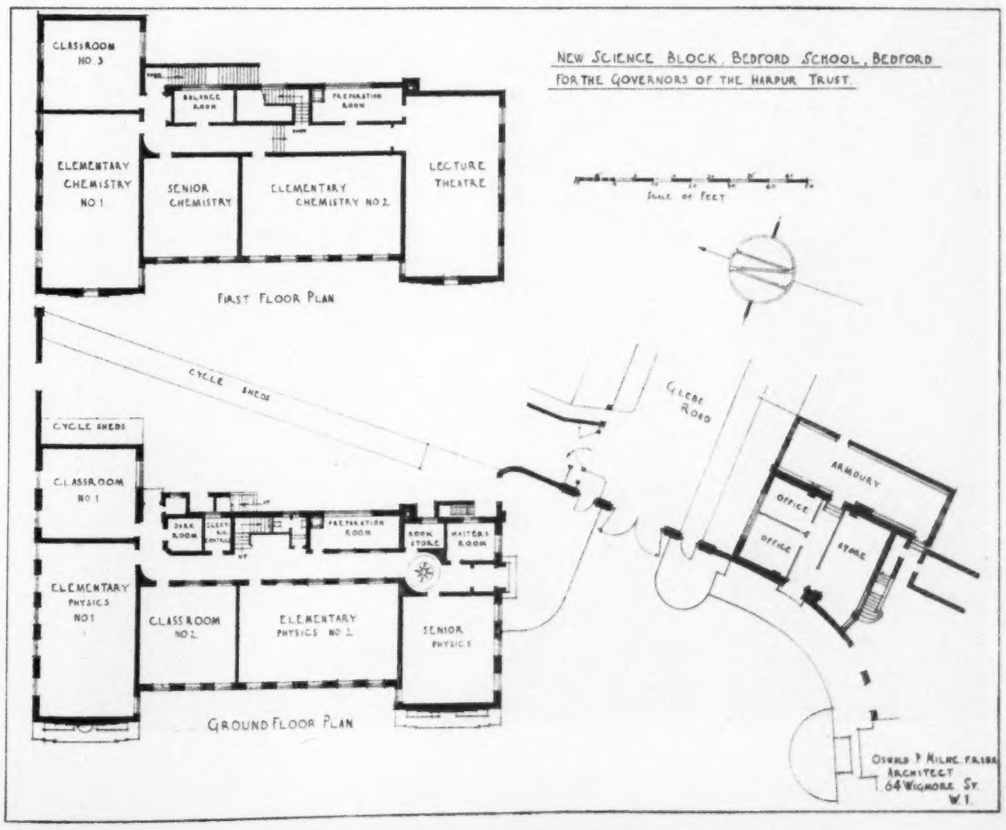


INTERIOR.

NEW GYMNASIUM, BEDFORD SCHOOL, BEDFORD.

MR. OSWALD P. MILNE, F.R.I.B.A., Architect.

ELEMENTARY CHEMISTRY LABORATORY, No. 2.

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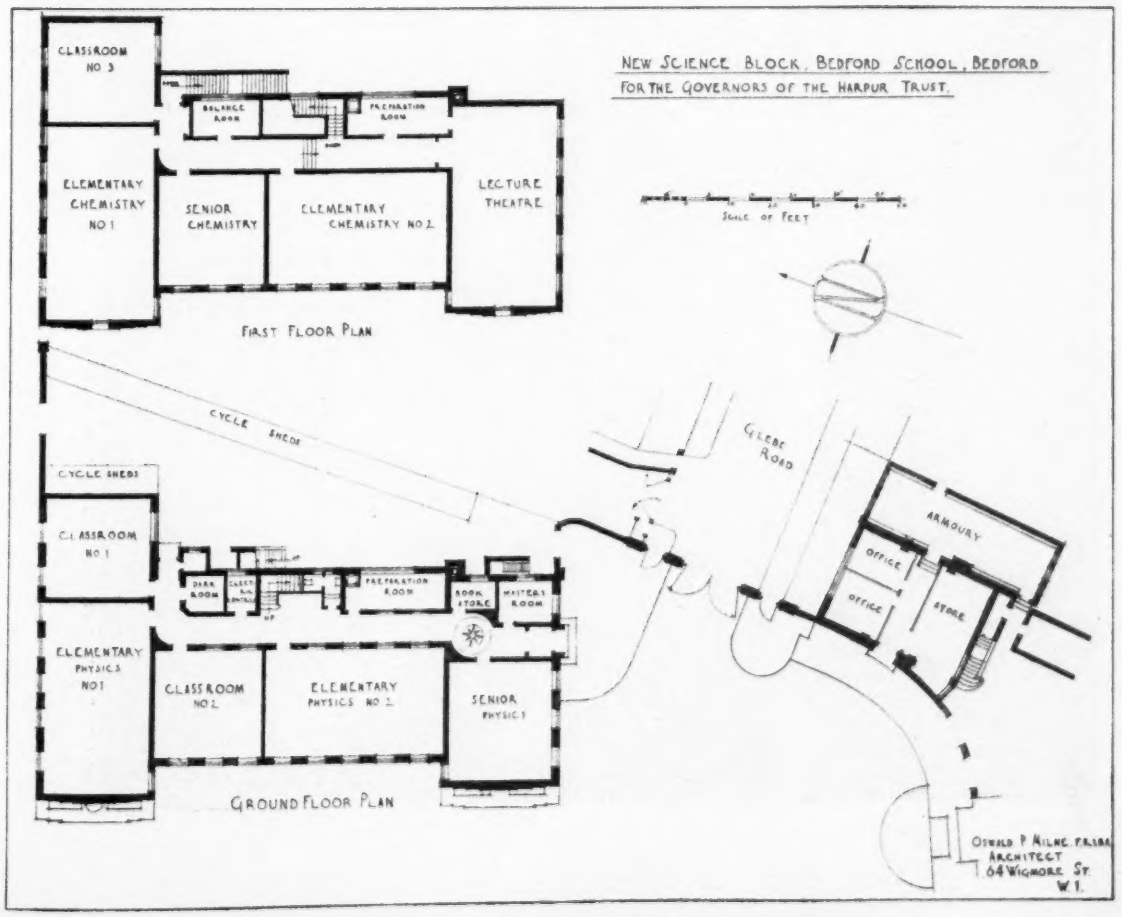


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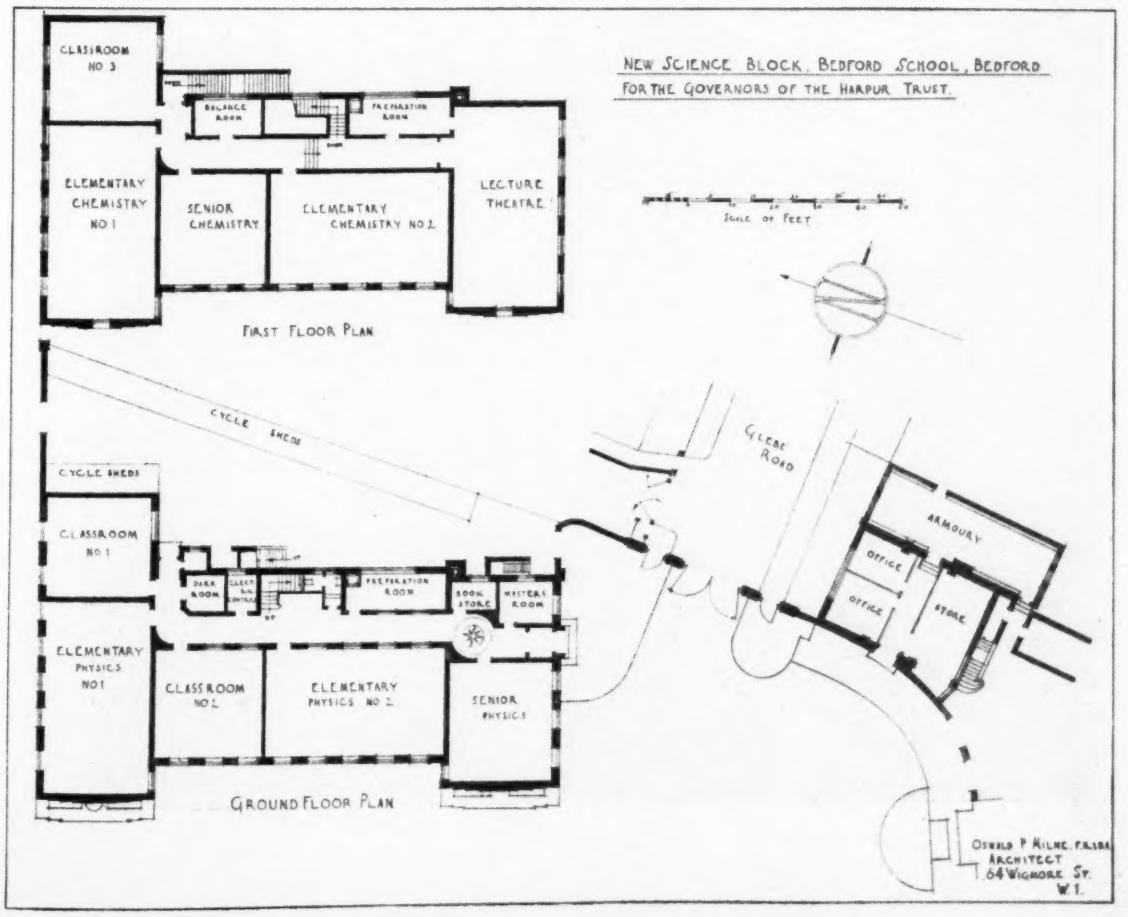
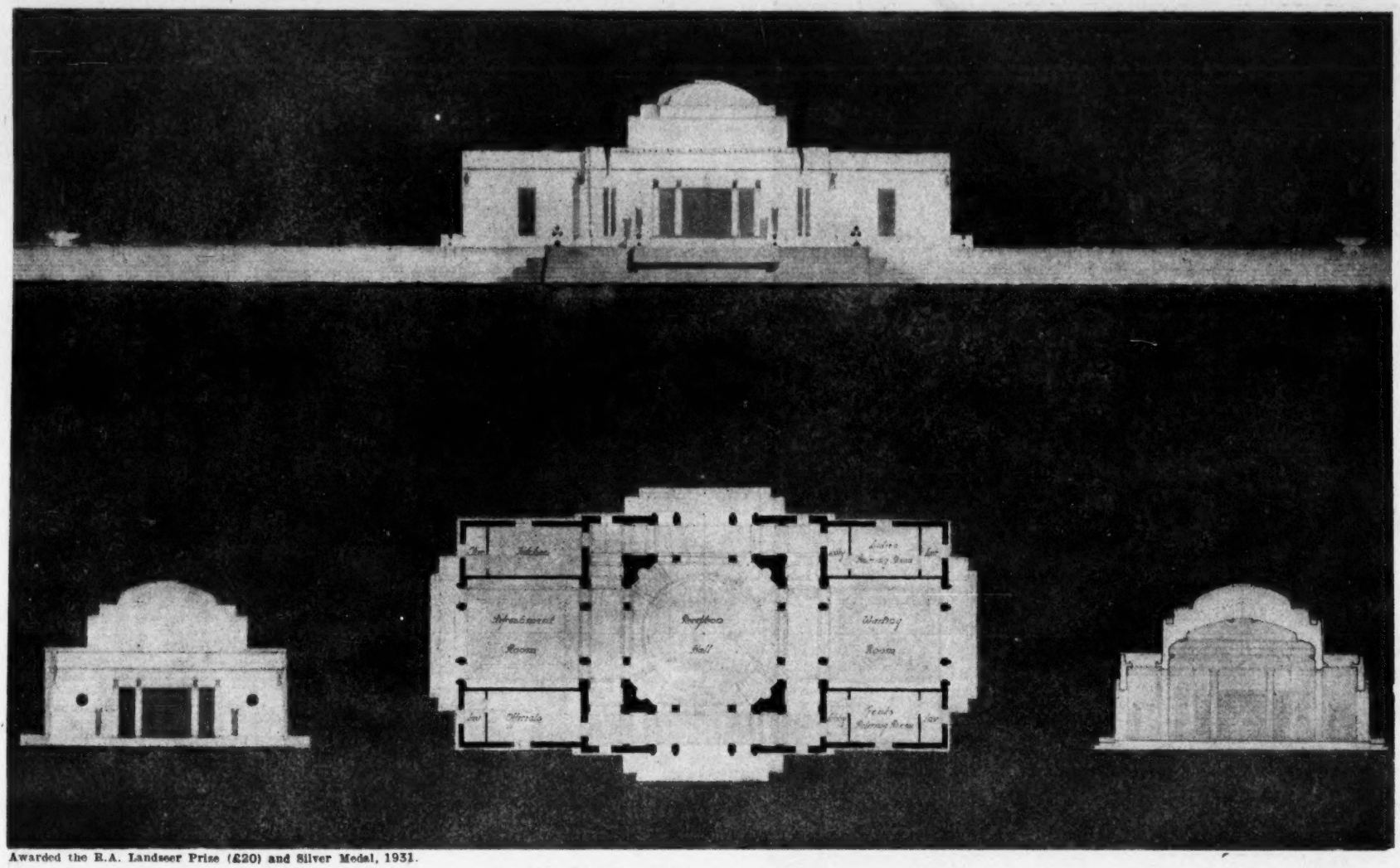



**NEW SCIENCE BLOCK, BEDFORD SCHOOL, BEDFORD.**

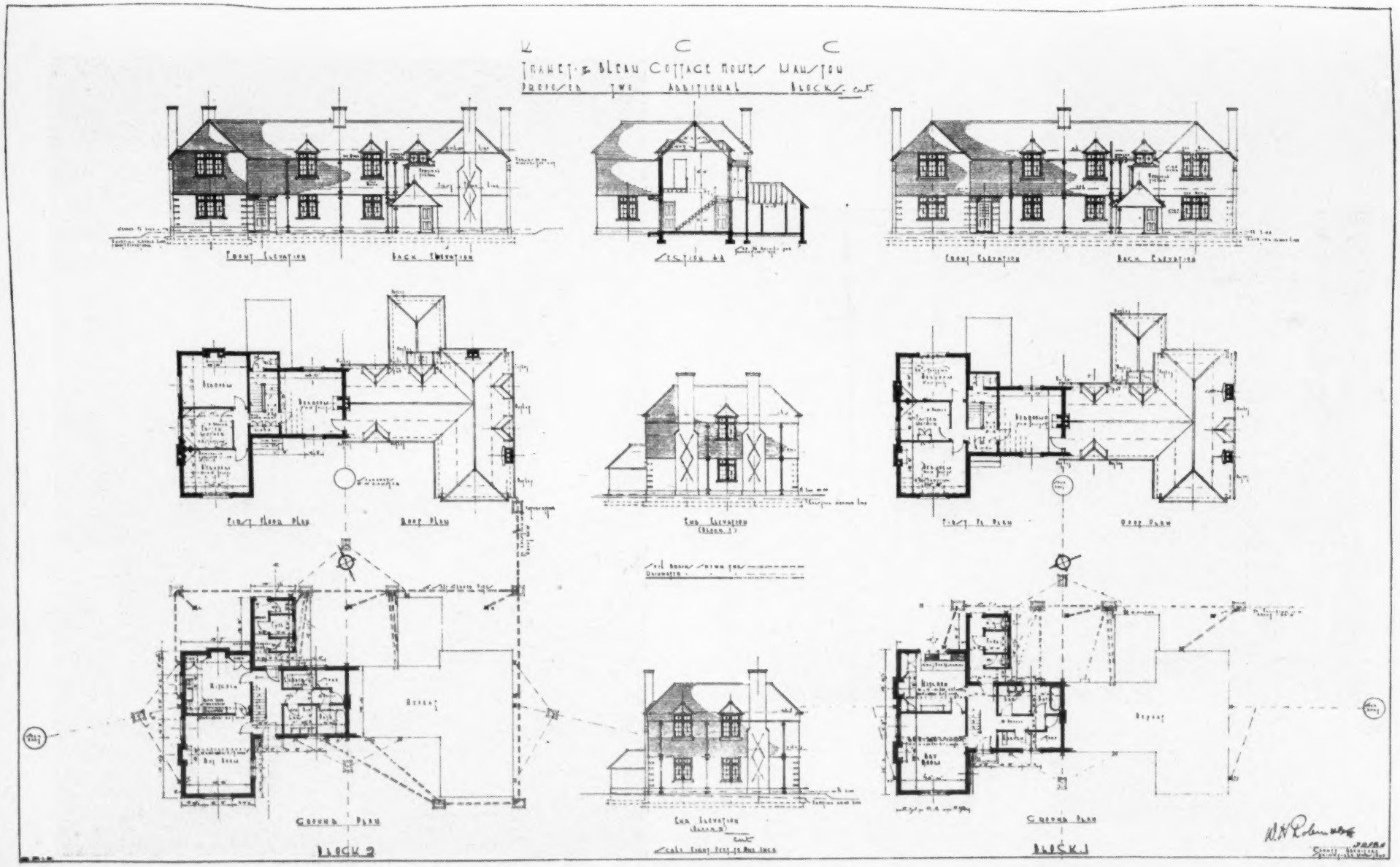
**MR. OSWALD P. MILNE, F.R.I.B.A., Architect.**




Awarded the R.A. Landseer Prize (£20) and Silver Medal, 1931.

DESIGN FOR A ROYAL LANDING STAGE.

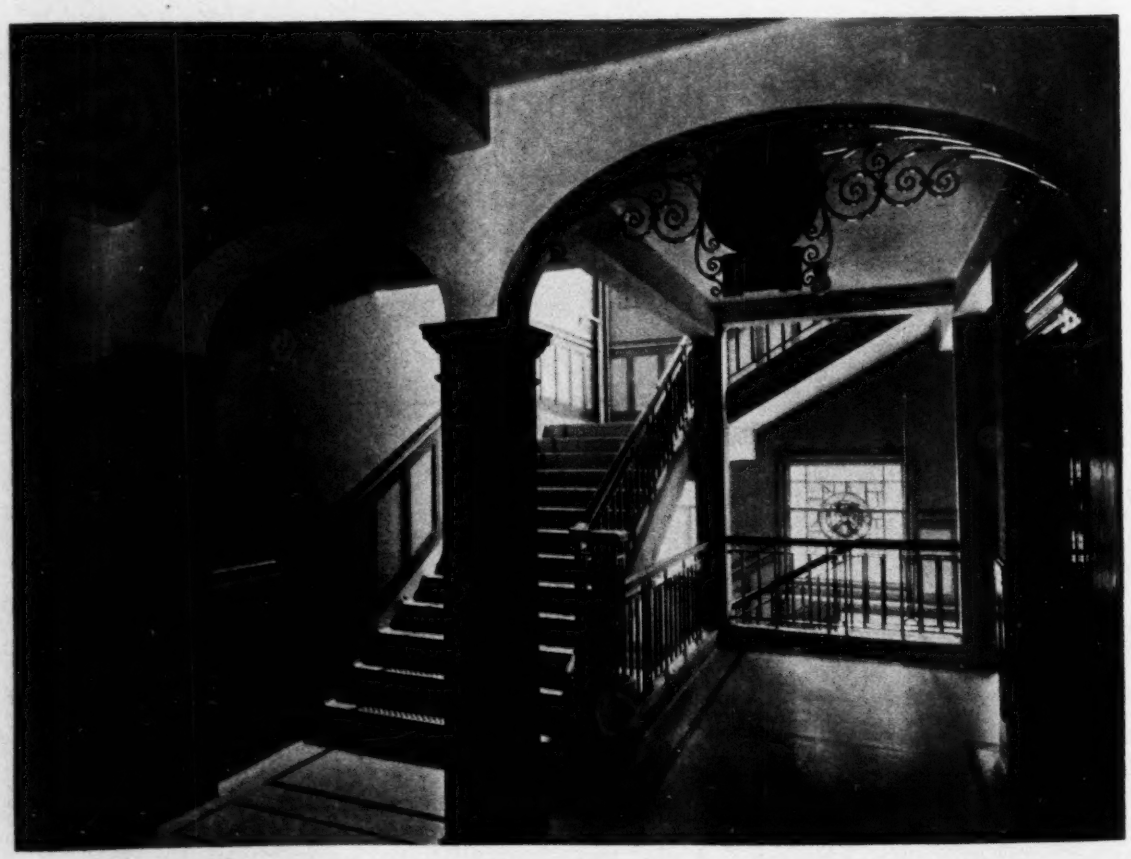
BY MR. ERIC HARTLAND, A.R.I.B.A.




THANET AND BLEAN COTTAGE HOMES, MANSTON.

MR. W. H. ROBINSON, F.R.I.B.A., Kent County Architect.

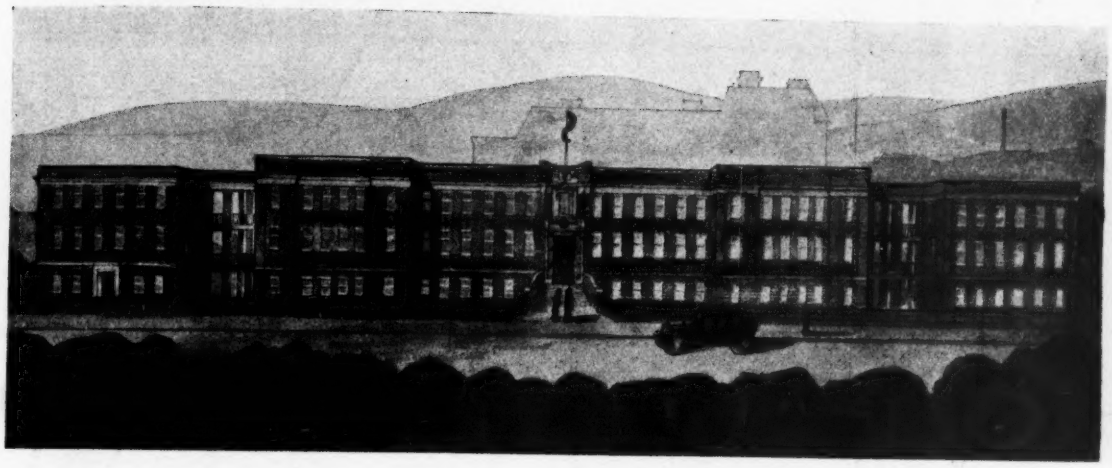
DETAIL OF PRINCIPAL ENTRANCE



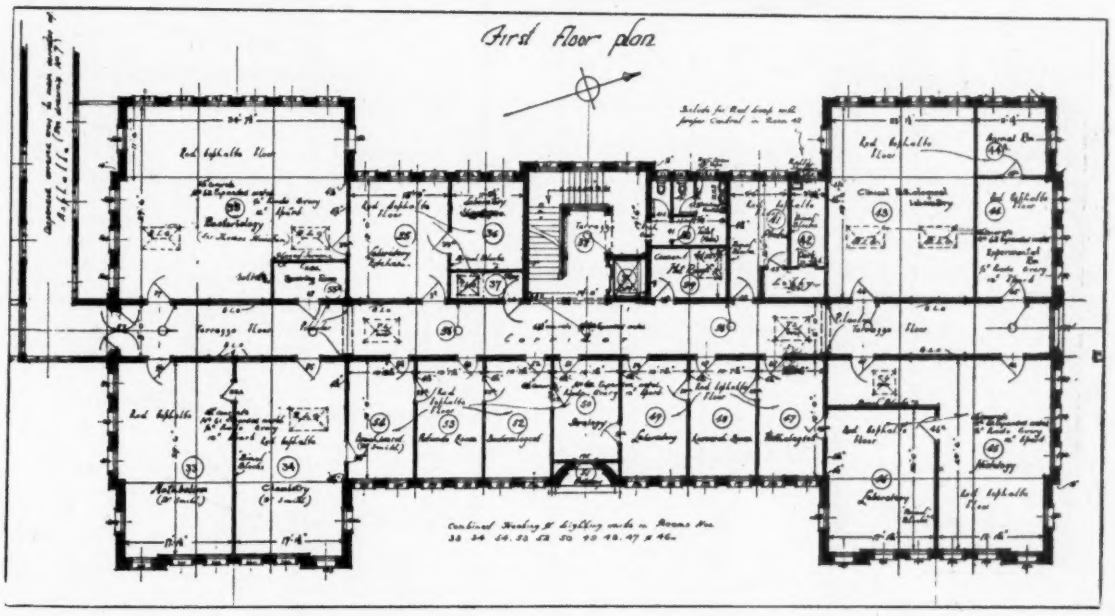
ENTRANCE HALL.

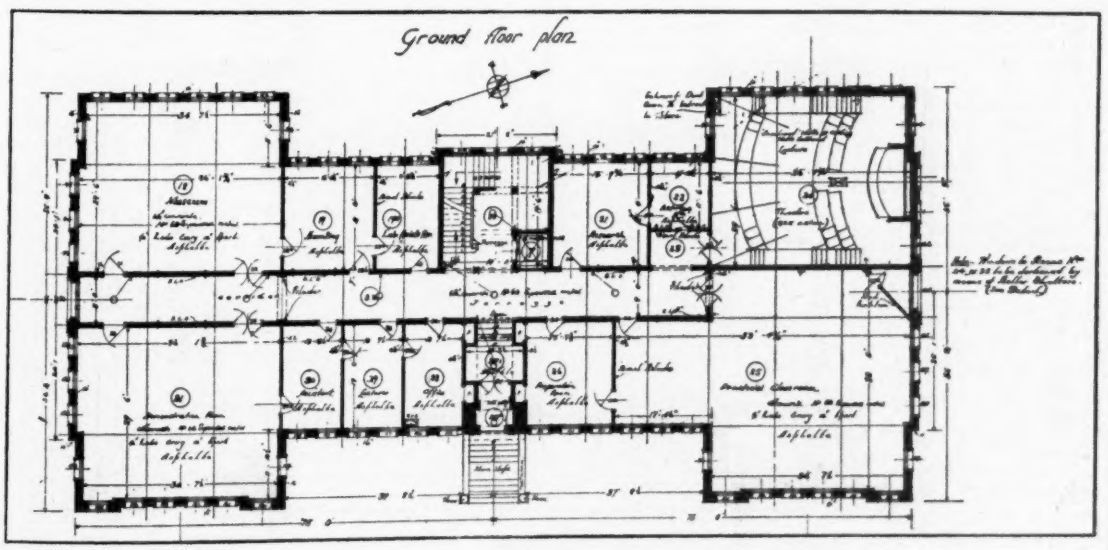
THE QUEEN'S UNIVERSITY OF BELFAST: Institute of Pathology.

MESSRS. YOUNG AND MACKENZIE, F.R.I.B.A., Architects.



FRONT ELEVATION.

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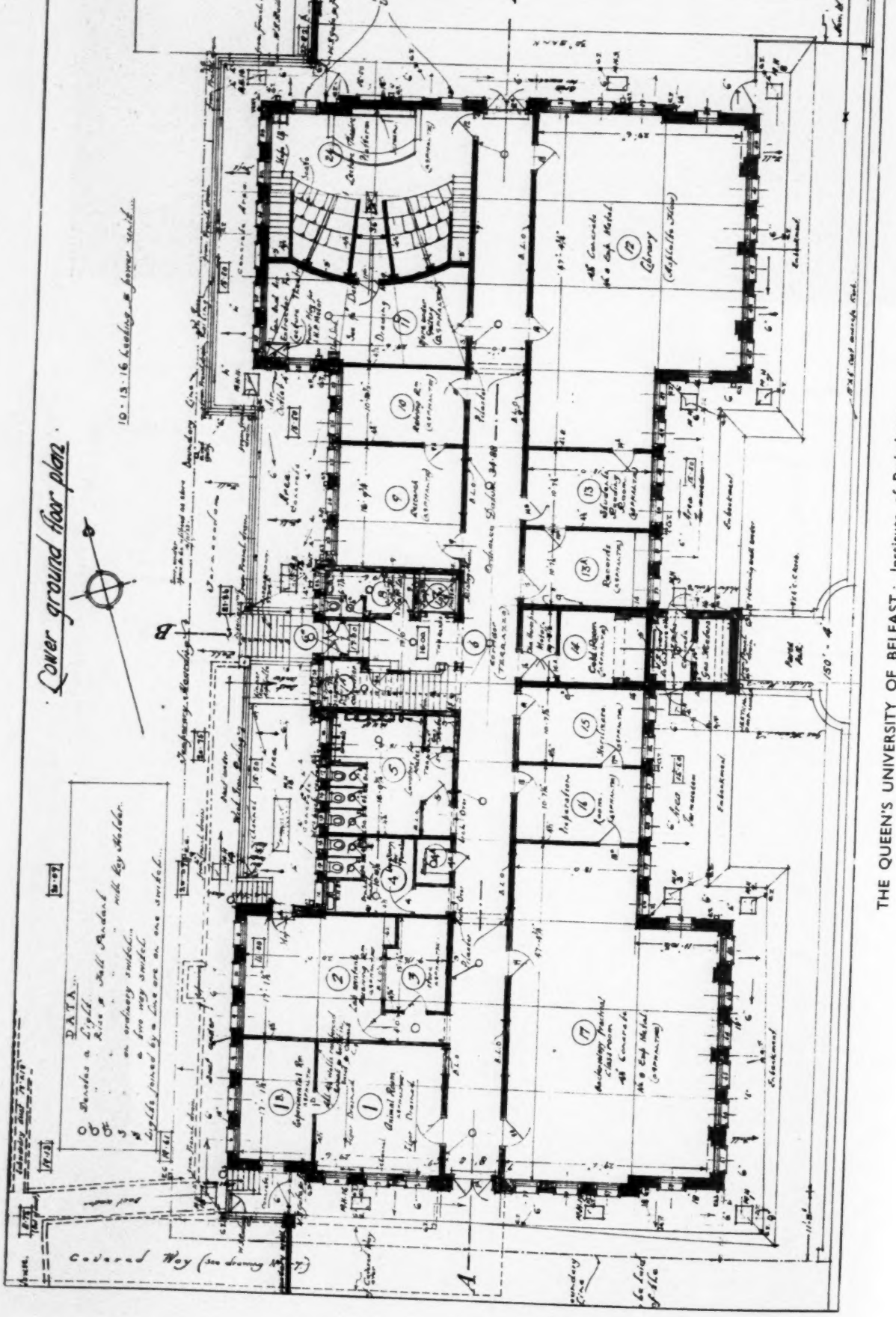


THE QUEEN'S UNIVERSITY OF BELFAST: Institute of Pathology.
MESSRS. YOUNG AND MACKENZIE, F.R.I.B.A., Architects.

# INSTITUTE OF LANDSCAPE ARCHITECTS

## PRESIDENTIAL ADDRESS.

The presidential address to this Institute was given on November 7 by Mr. E. Prentice Mawson, F.R.I.B.A., M.T.P.I. In the course of this, the speaker said that to-day, after a lapse of little more than three and a half years from the commencement of their activities as a society, they found themselves firmly established and with a membership of over fifty, far more than could have been reasonably demanded in a profession which was, as yet, in its infancy in this country. Having referred to the success of the recently founded School of Landscape Architecture at Reading, the speaker said the amount and extent of the recognition which their Institute had received from both professional and lay Press showed a growing, if only nascent, appreciation of the value as well as the aim of the landscape architect, and while there was still much to do in the education of the public, a beginning had been made along the right lines which, if energetically carried forward, ought entirely to do away with misapprehensions and neglect.

Upon what lines should their Society press forward in the immediate future? He had before him as he prepared that address quite a large budget of Press cuttings, all dealing with the preservation of rural England, by the reservation of national parks or, on the other hand, rendering those wild, open spaces which already existed easily accessible to all who cared to visit them. This, to his mind, opened up a large field for exploitation, large enough, indeed, to absorb most of their activities during the coming year. It seemed obvious to him that if they could identify themselves with all the really practical among the movements to that end which were already in the public mind, and intensify them by giving them proper purpose and direction, they were much more likely to accomplish something really useful than if they tried to inaugurate some other lines of advance which had as yet no popular backing. As he read his Press cuttings, they sounded to him like the expression of a rather bewildered desire to do something which obviously badly needed doing, without much real understanding of the method of its accomplishment. They seemed to him to ask rather despairingly: "How can we prevent our beloved England being overrun with tin huts and asbestos bungalows; how can we preserve for all time some of the wild beauty which still remains to us, and how can we ensure access to those beauties which are at the present being rather selfishly withheld from us as game reserves or otherwise"

He did not mean that they should try to supplant the societies already hard at work on the great problem of the preservation of natural beauty in all its forms; where the Institute of Landscape Architects could add its special quota to the work as a whole was, he thought, along three main lines of many other smaller ones. Those were, firstly, the restoration of beauty already marred and disfigured; secondly, the education of the public taste in that which was beautiful, especially in connection with those developments which, unfortunately, must necessarily take place in areas of special natural beauty; and, thirdly, in assisting with the work of rendering those beauties more accessible in such a manner as to interfere as little as might be with their intrinsic charms.

Referring to the new by-pass and other roads which had been made in such numbers recently, the speaker said that where these passed through rough or wooded country, it would have been far better if, instead of grading back the banks on either side to a smooth O.G. line, and carefully turfing them, they had been left in a rugged state where ferns, moss and bracken could have clothed them, and flaming gorse crowned them in that inimitable way in which nature always endeavoured to cover up her scars and make out of them something even more beautiful than that which originally existed.

Especially was this the case where the road had been cut through rock, and the landscape architect might again help by insisting that nature should be helped in this process by judicious planting of indigenous species, which, if once introduced, might be left to acclimatise themselves and become indistinguishable from that which was nature's own handiwork, self-sown.

The road engineer, trained in the exact sciences of engineering, sanitation and the like, was often far too anxious to round off his work and complete it (as he thought) by doing those and other unnecessary ancillary works which had far better be left undone. Where he excavated a boulder, he broke it up as an encumbrance, and his aim would too often appear to be to leave everything "icily regular, splendidly null."

Dealing with the financial aspect of public parks, etc., the speaker said that over and over again in the last fifty years, when his firm had been called in to advise on the laying-out of a public park, recreation ground, golf course, seaside promenade, or some other form of open space, it had been found possible—by purchasing a rather larger area than was actually necessary for the purpose of the open space and laying-out the surplus in building plots in complete consonance and at the same time as the park or other open space, and selling it for controlled building sites—to reap such a large return in what was quite wrongly called "unearned increment" as to go a long way towards the paying of the reversionary interest on the sum borrowed for the works originally contemplated.

# "THE BUILDER" DEBATE

## LXVII.—DEPOSITED PLANS BY ARCHITECTS.

Sir,—Whatever the merits may be of "Positive's" proposition, the arguments he puts forward in support of it are singularly lacking in forcefulness. The short answer to those set out in his second, third and fourth paragraphs is that in point of fact nearly all plans deposited do comply with the conditions therein laid down. In reference to the contention that the labours of those dealing with elevations would be lightened, if architects were entrusted with the work, I much doubt whether this argument is sound. It seems to me that the real difficulties of Panels will be found in relation to plans that might be termed border-line cases, where the points arising are mainly matters of taste; but that is a subject that has already been debated.

The essential point to be seriously considered is whether the architect's claim to special protection is valid. This is a claim that has been put forward repeatedly over a great many years, and has not been seriously challenged, with the result that the average architect seriously believes that it is unchallengeable. The truth is, however, that outside the industry there are few who take any interest in the point at issue; and inside, the architect in active practice holds such a predominant position as to make challenge unsafe. Another point that makes for silence is that the average builder does not consider that his interests are seriously threatened, because he does not think that anything is likely to come of such proposals in the near future.

It must, of course, be granted that, when any considerable amount of skill is required, the whole of the world's work would be much better done were only those with proved qualifications entrusted with it. But that applies with equal force to the work of the builder and nearly all other constructors. "Positive's" proposal differs from that in so far as he would take out of the hands of those who perform it in a reasonably satisfactory manner, work that is frequently entrusted to them in the ordinary way of business, and give it to others. His plea is that architects should be protected from competition. It is true that "Positive" makes a proviso that the architects shall be qualified, but I think it is only because some architects object to registration, that he has not used the word "registered," which would better have expressed his aims. What it really comes to is that, despairing of ever being able to convince the general public that it is worth while to employ architects on small works, "Positive" would resort to force. It is just this attitude that accounts for the signal failure of architects to make their way in public favour with that speed which is so much to be desired.

I note with amusement and amazement that "Positive" limits his requirements to the preparation of deposited plans, and says nothing about the supervision of the erection of the buildings. This and what he has to say about the low fees to be charged leads me to suppose that his appeal or threat is still, at least to some extent, addressed to the speculative builder. My opinion that this is the case is strengthened by finding that he refrains from the usual clap-trap in regard to saving his clients from robbery and all the other rubbish that the architect so frequently, and so mistakenly in regard to its effects, puts forward when engaged on work of propaganda. I congratulate him on his restraint.

Turning to "Positive's" arguments in detail, I would point out that it is necessary that a plan, to obtain approval, should indicate an intention to comply with the by-laws, and that those to whom he takes objection are well aware of this and make compliance. To do less would not only involve them in further trouble, but could cause their clients so much annoyance as in some cases to bring about dismissal and in others lack of employment. I would point out that by far the greater number of such plans are prepared by people who at least sign them as architects, and that builders are both able to estimate from them and to translate them into buildings. From the point of view of people of taste, the design may be in many cases poor, but usually the planning is reasonably good. That the design is so often inferior is a point in "Positive's" favour, but such matters as this cannot be put right by high-handed action. To suggest that it should be so dealt with is much more likely to provoke hostility than to bring about improvement. Some good would follow on closer co-operation between architect and builder, but as long as the architect is taught to regard builders, as a class, with deep suspicion, it is useless to hope that the average builder will not prepare plans when opportunity offers.

To suggest that a surveyor will spoil the development map or plan of the district for which he is responsible for lack of precise information is to label him as incompetent. And to suggest that rating authorities base their decisions on deposited plans without troubling to inspect the completed building is to ignore the facts.

As to unfair competition, the architect has nothing to meet that can be compared with the tooth-and-claw competition that has prevailed during the past several years amongst builders, and which the architect has in many cases, wittingly or unwittingly, done much to foster. With everything at stake, the builder has fought on grimly and silently, except for an occasional appeal to the architect for a fairer deal.

NEGATIVE.

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### The Royal Scottish Academy.

At an assembly of Academicians of the Royal Scottish Academy held in Edinburgh, Mr. George Pirie, R.S.A., of Wardend, Torrance, Stirlingshire, was elected President in succession to Sir George Washington Browne, who has resigned.

# SOCIETIES AND INSTITUTIONS

## WEST YORKSHIRE SOCIETY OF ARCHITECTS.

### Members' Exhibition.

The Earl of Harewood, K.G., on November 4 opened an exhibition, in the Leeds City Art Gallery, of photographs, models and perspective drawings of work executed by members of this Society, the Lord Mayor of Leeds being in the chair.

Lord Harewood said that the members of such societies had an immense responsibility in guiding the man in the street towards an appreciation of culture and taste. He regarded architecture as, in some respects, the most important of the arts, because it obtruded itself upon everybody's notice. They were bound to be influenced by what they saw around them in their everyday life. He did not think that imitations of Greek, Roman or Gothic styles were to be commended in modern life. He felt it was absolutely essential that they should carry on the development of their lives in art, as fast as engineers and inventors were doing in their own spheres.

Expressions of thanks for the interest taken in the Society's work were tendered by Mr. B. R. Gribbon (President) and by Mr. T. Butler Wilson.

The following members (of Leeds, except where otherwise stated) were represented by contributions :—Chorley, Gribbon and Foggitt; R. B. Armistead (Bradford); G. W. Atkinson; Bain and Johnson; G. F. Bowman and Son; Braithwaite and Jackson; W. A. Burnett; Butler Wilson; F. L. Charlton; C. H. Crowther; Norman Culley (Huddersfield); W. F. Dawson; A. E. Dixon; R. A. Easdale and Son (Castleford); Empsall, Clarkson and Clarke (Bradford); C. Hickson (Huddersfield); W. Alban Jones and Stocks; Kirk and Tomlinson; Milner and Craze (Skipton); W. J. Morley and Son (Bradford); Paxton and Hill; P. O. Platts (Wakefield); J. C. Procter; E. O. Robinson (Bingley); Percy Robinson: L. N. Sanderson (Scarborough); F. Tanner (Harrogate); J. J. Wood; and J. Stanley Wright.

## DEVON AND CORNWALL ARCHITECTURAL SOCIETY.

### Annual Dinner.

Sir Giles Gilbert Scott, President of the Royal Institute of British Architects, was principal guest at the annual dinner of the Devon and Cornwall Architectural Society at the Grand Hotel, Plymouth, on November 2. Mr. B. Priestley Shires, president of the society, presided.

Proposing "The Royal Institute of British Architects," Mr. W. J. M. Thomasson, Devon deputy county architect, said that the Society had no branch yet in Cornwall, but he hoped in two years' time, when Sir Giles's successor came down, they would have established a branch there, and so completed the conquest of the Western territory.

Sir Giles, in reply, said he was delighted to hear that Plymouth had decided to recondition its historic areas rather than destroy and rebuild them. He hoped the precedent would be followed all over the country. He hated to see old historical architecture swept away when it could be reconditioned and made into beautiful and not unhealthful districts.

Submitting "The Devon and Cornwall Architectural Society," the Mayor of Plymouth (Alderman R. R. Oke) said when the Society met in that room on a future occasion they might look out over the Sound and see flood-lighting carried along the foreshore from Staddon Heights to Mount Edgcumbe. The Breakwater, also, might be illuminated, and they would then see one of the most wonderful sights they had ever had presented to them.

Mr. B. Priestley Shires responded.

The toast of "Our Guests" was proposed by Mr. A. H. Ough. Dawlish.

Responding, the Mayor of Exeter said that the habits of the people of different periods were stamped by the architecture they encouraged. He hoped this generation was not to be judged by architecture designed in one of the Government departments. He hoped their claim to fame would rest on similar architecture to that of Liverpool Cathedral, designed by the president of the R.I.B.A. He also expressed the hope that Plymouth in the near future would have a city hall and civic buildings which would stamp themselves as part of the architecture of that area.

## INSTITUTION OF CIVIL ENGINEERS.

### Presidential Address.

At the opening meeting of the new session of this Institution, on November 7, the President, Sir Henry P. Maybury, delivered an address to the members, in the course of which he referred to the debt of gratitude which the nation owed to the civil engineering profession for splendid services in carrying out the vast programme of new roads, and said it was unfortunate that such great engineering works should be the subject of controversy. The works described, however, were instrumental in providing a large amount of employment during a difficult industrial period, and much of what had been done was bound to prove of inestimable value to the community as a whole. The great improvement of roads during post-war years would be reflected in reduced costs hereafter.

The speaker then referred to the necessity for devising means for reducing the alarming number of accidents on the highways of the country. That problem, he said, should receive quite specialised attention, and he suggested that chief engineers should seriously consider the advisability of including in their organisations traffic branches, whose sole function should be the study of this grave problem.

Travel over the highways having long since lost all local colour, the speaker wondered how long it would be before the control and management of the highways outside big centres of population would be entrusted to some public board or authority. He stressed the necessity for taking a wide view in dealing with transportation matters, and for providing for the adequate lay-out of highways on sound transport lines in all regional town-planning schemes.

There were on the roll of the Institution nearly 11.000 members resident in all parts of the world, and there was an increasing number of municipal and county engineers in that membership. The outlook for civil engineers was somewhat depressing at the moment, but there was clearly an improvement manifesting itself, and he looked forward to the time when members of the civil engineering profession would, once again, be fully employed.

## INSTITUTION OF MECHANICAL ENGINEERS.

### "A National Water Grid."

A committee set up by the Institution of Mechanical Engineers is formulating proposals for a national "water grid," to provide the whole country with adequate supplies of water. Mr. Alan E. L. Chorlton, in his presidential address to the Institution, advocated the adoption of such a plan. The country, he said, as a whole was well provided for, but the rainfall varied greatly as between different parts. It was suggested, Mr. Chorlton continued, that a scheme should be worked out whereby areas with heavy rainfall would provide, by suitable trunk mains, the supply to those parts of the country where it was required or would be required. The "wet spot" of England was the Lake District. It might be thought that this district was at much too great a distance to consider as a possibility, but that was not really so.

The suggestion for the main vertebrae of a national grid did not mean that their construction should take place at the same time—they would be undertaken only as the need arose—nor did the suggestion overlook the creation of local grids or networks of supply to many, notably rural, areas, which should form the first step in the improvement of our water supply.

The President suggested also that the Government should set up an Engineering and Industrial Council, charged with bringing the public services up to the level of efficiency of our industries. The public services had been developed separately, with but little interconnexion, and water, gas, drainage, sewerage and transport urgently required co-ordination.

## INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS.

### County and Highway Engineering Examination, September, 1933.

Subject to confirmation by the Council of this Institution, the acting examiner recommends that the Certificate in County and Highway Engineering be awarded to :—J. E. Baldwin (Walton-on-Thames), L. S. Dower (Ipswich), J. Jamieson (Glasgow), E. Lowe (Ashton-in-Makerfield), E. M. Richardson (Manchester), A. C. White (Nottingham).

## CHADWICK PUBLIC LECTURE.

### Sanitary Arrangements of the Mediæval Monastery.

A lecture on this subject was given by Mr. Percy Flemming, M.D., B.S., F.R.C.S., F.S.A., on Thursday, November 2, Mr. W. E. Riley, F.R.I.B.A., M.Inst.C.E. (Chadwick Trustee), being in the chair. The lecturer said that the builders and engineers of the mediæval monastery had to provide sanitary arrangements for a household which might number 50-60, or, at times, 70 monks, with a large number of lay brothers in addition. Their work reached a high standard of efficiency—a standard which was not maintained in the centuries that immediately followed the dissolution of the monasteries. At first the monasteries were dependent on wells for their water supply, but later a supply by gravitation became the rule. The twelfth-century plan of the Monastery of Christ Church, Canterbury, showed that the water was collected into a conduit house some distance from the city, whence it was conveyed to the monastery through lead pipes which passed the water through five settling tanks before reaching the city wall. Similar tanks were shown on the fifteenth-century plan of the water supply of the London Masterhouse. Within the monastic precincts the water was conveyed in the first place to the infirmary, and then to the lavatories for hand washing, thence to the various domestic offices. There were two types of lavatory: an earlier one consisting of an octagonal building containing a basin of similar shape, and a later one—much more common—in the form of a lead-lined stone trough, which either projected into the cloister park or was fixed in a recess on either side of the frater door. Baths were provided for guests, and for medical purposes, but the rule forbade their regular use by the monks. The lay-out of the monastic buildings was arranged to secure efficient drainage. The great drain was flushed either by turning the tail of the mill race into it, or by letting the waste water run through it. The sanitary block, or *domus necessaria or necessarium*, was placed over the great drain or a running stream. Privies were arranged in rows, placed over the drain or stream, each being lighted by a small window or separated from its neighbours by a wooden partition. A doorway led from the dormitory to the sanitary block. At Canterbury there were fifty-five privies. The Carthusian monastery required a different plan, as each monk lived alone in a cell situated in the corner of a little garden. Water was supplied to each cell by means of a lead pipe, the tap being placed in a recess in the lobby of the cell. Each cell had a separate privy reached through a door in the back wall of the garden, the path from the cell to the privy being protected by a wooden pentile. At Mount Grace Priory the privies were placed over a running stream just outside the garden wall.

This lecture was illustrated by lantern views of old plans and present traces of the mediæval arrangements.

# DRY ROT IN BUILDINGS

By J. GREAVES SCHOLES, F.S.I.

THE following few notes on the cause, symptoms and treatment of dry rot may prove of assistance in detecting its presence at an early stage, and in giving effective treatment to check its growth before great damage has been done.

### Causes.

The primary cause of dry rot is enclosed, or partially enclosed, moisture in wood. Light and ventilation are its greatest enemies. If unseasoned or damp wood is painted or so covered that the moisture cannot dry out, a suitable breeding ground for the fungus is provided.

One of the most frequent causes of dry rot is the lack of ventilation under boarded floors. It is not sufficient to have ventilation bricks in two external walls of a room when the two internal sides are cut off by passages or rooms having solid floors. There will always be a pocket of stagnant air in the angle between the two internal walls. This can be avoided by the provision of one or more air-ducts under the solid floors to give through ventilation from one side of the house to the other.

Care should always be taken that such ventilating bricks as exist are kept open and that the outside soil is well below the damp-course in the wall.

The total covering of a floor with linoleum, especially a wood-block floor, may cause dry rot on account of the upper surface of the wood being almost hermetically sealed.

### Symptoms.

Dry rot in its early stages is not easily discernible, as darkness is one of the most favourable conditions under which it thrives. It can therefore grow and spread considerably in such places as behind skirting boards, door and window linings, wainscoting, wood panelling on walls or in joists, and the underside of floorboards, before any outward signs of its presence appear.

The growth of fungus on woodwork or out of its joints is, of course, easily seen It may appear in the form of a velvety mould, generally light grey in colour, or in thin tendrils, somewhat resembling a miniature tree pressed flat. This latter is generally found behind woodwork such as skirting boards, etc., or on a wall in a dark place.

Another outward sign is the appearance of a corrugated or wavy effect on painted woodwork, which eventually shows cracks. In this case it will often be found, when the woodwork is removed, that little more than the painted surface remains, all the timber behind having crumbled away.

Generally speaking, the person best situated to discover the symptoms of dry rot is the one who does the cleaning, dusting, polishing, etc., of the woodwork.

Another means of discovering the presence of dry rot is to tap the woodwork with a hammer; if the wood is sound it will ring hard and firm and the hammer will rebound, but if badly decayed underneath it will appear dead and dull to the blow.

A stout knife-blade pressed into the wood will reveal the presence of decay. If the wood is sound the blade will not enter or leave easily; if it is decayed, the reverse is the case. In all cases where dry rot is suspected the woodwork should be removed and a careful examination made underneath.

### Treatment.

The only satisfactory means of eradicating dry rot is to remove all the material which is in any way affected by it. This is comparatively simple, though sometimes costly, in the case of timber. Great care should be taken that every particle of affected wood is removed and burned; it is always advisable to be generous in this removal, and to take away a little more than that which is actually affected. Great care should be taken that all woodwork which is let into the wall, such as plugs, etc., is removed, as this is very often the source of the trouble. The vacant holes should be well scraped out and all fungus and decayed wood carefully removed.

Unfortunately, dry rot is not always satisfied with wood, but attacks the brickwork and plaster as well. In some cases it is content to operate on the surface or between the brickwork and the plaster; in other cases, and these are much more serious, it penetrates into or through the brickwork.

Where dry rot is found on walls the part affected should be thoroughly scraped. If plastered, some plaster should be removed to ascertain if there is any fungus growing between the plaster and the wall. The joints of the brickwork or masonry should be raked out ¾ in. deep. It is a useful precaution at this stage to use a plumber's blow-lamp to heat the wall to such a degree that any remaining fungus is killed. All material accumulated by scraping or raking out joints should be carefully removed and sterilised by fire or other means to prevent infection.

The whole of the surrounding material must now be sprayed or well brushed two or three times with either corrosive sublimate or acid magnesium silicofluoride, care being taken that the liquid gets well into all openings or cracks. After this treatment the raked-out joints in the wall may be pointed up with cement mortar (two parts sand to one of cement), or, if they are in a cellar or other similar situation, they may be left open for a time and watched for possible recurrence.

All new timber which replaces that taken out and which will be covered in, such as joists, plugs, etc., should be thoroughly treated with creosote or other suitable wood preservative before being fixed.

A few words on the characteristics of the two spraying liquids may be helpful.

*Corrosive sublimate* is highly poisonous. Great care should be taken in handling it. It is probably more easily obtainable than acid magnesium silicofluoride, and can be used in a metal spray. Two ounces should be dissolved in one gallon of water. It is more effective when applied hot.

*Acid magnesium silicofluoride* is not poisonous, but highly corrosive. It must not be put in a metal vessel or spray, and should be mixed in a wooden tub and applied with a brush. If used on exposed surfaces a certain amount of efflorescence may appear; its penetrative powers are greater than those of corrosive sublimate, and it is therefore probably more effective. Half a pound of acid magnesium silicofluoride should be dissolved in one gallon of cold water.

A treatise has been published by the Department of Scientific and Industrial Research, entitled "Dry Rot in Wood." This can be obtained from H.M. Stationery Office for 1s. 1d. post free. The information contained in this pamphlet goes into considerable detail, and I should certainly recommend anyone who is attacking dry rot to obtain a copy.

There is another form of decay which is sometimes mistaken for dry rot. This is caused by the ravages of a grub or beetle. A number of tiny holes appear in the wood as if a very small drill had been used, and powdered wood, like dust, is expelled. Sometimes the holes are so close together that the walls dividing them collapse, making it appear as though the wood had decayed. Badly affected wood should be replaced though there are preparations on the market now, such as "'Rentokil," and the "Hopewood Worm Destroyer."

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### Campion Hall, Oxford.

Sir Edwin Lutyens, R.A., has been commissioned to redesign "Campion Hall," one of the most celebrated lodging-houses in Oxford, as the new headquarters of the Society of Jesus.

# NEW PUBLIC WORKS

### Chelsea.

A proposal that the new Chelsea Bridge should take four lines of traffic instead of six as originally intended has been approved by the London County Council. The recommendation reduces by £179,250 the capital estimate of £659,250 for the work approved by the Council in 1931. Messrs. Rendel, Palmer & Tritton have been appointed engineers.

### Croydon.

The T.C. are inviting applications, to be made by November 10, for the erection of an elementary school at Goodwin-road, Waddon, to accommodate 500 scholars. By the same date applications for an elementary school at West Way, Shirley, for 150 scholars, are invited. Tenders are returnable by November 24.

### Farnham.

The Hospital Committee of the U.D.C. proposes to invite tenders in the spring for the erection of the new buildings proposed at Timmers Cottage Hospital.

### Ilkley.

An open-air bathing pool is proposed at Ilkley by the U.D.C., at a cost of £5,000. A Ministry of Health inquiry has been held.

### Knaresborough.

The West Riding Public Health and Housing Committee is inviting tenders for the erection of a sanatorium at Scotton Bank, near Knaresborough, to plans by the West Riding Architect, County Hall, Wakefield. Tenders are returnable by December 11.

### Portsmouth.

A scheme for developing, on winter garden lines, Lumps Fort, an obsolete military post on Southsea Front, is being considered by the Portsmouth City Council. The project is estimated to cost £200,000. A swimming pool, concert-hall, restaurant, museum and picture gallery are proposed.

### Southall.

Tenders for the erection of the Southall-Norwood Hospital are invited. Plans are by Messrs. Bostock and Hollins, 4, South-road, Southall, Middlesex. Applications for specifications must be made by November 16.

### Southampton.

At the opening of the new Law Courts, part of Southampton's Civic Centre, it was announced that the Ministry of Health has given permission for the Council to proceed with the next section of the scheme, which will include the Town Hall. Tenders are to be invited at once. The architect is Mr. E. Berry Webber, A.R.I.B.A., 42, Gordon-square, W.C.1.

### Southend.

One hundred and twenty-two houses are proposed on the Eastwood-lane site by the C.B., to plans by Mr. R. H. Dyer, Borough Engineer. Tenders are returnable by November 13.

### South Shields.

The E.C. of the Corporation has appointed Mr. G. R. Smith, of King-street, as architect for the proposed new high school for boys; Mr. H. Hill, Winchester-street, as architect for the domestic subjects centre and gymnasium at the Central School; and Mr. F. W. Newby, 37, King-street, as architect for alterations and additions to the Secondary School.

### Torquay.

The T.C. is to promote a Bill in Parliament to raise a sum of approximately £250,000 for various works. A reservoir at Ternworthy, extension of the electricity undertaking, road widenings, alterations to the harbour wall, and the construction of assembly rooms are included in the scheme.

The Corporation has also approved the preparation of plans for providing electricity showrooms and offices on the Y.M.C.A. building site next the town hall. The cost is estimated at £51,000.

# INSTITUTION OF STRUCTURAL ENGINEERS

## REINFORCED CONCRETE RAILWAY VIADUCTS NEAR BELFAST.

A PAPER on this subject was read by Mr. R. L. M'Ilmoyle, A.M.Inst.C.E., before a meeting of this Institution, held on Thursday, November 9. The speaker said that the Northern Counties Committee of the London Midland and Scottish Railway had been severely handicapped by the fact that all main line trains had had to reverse at Greenisland, 6¾ miles from Belfast, the main line terminus. It was decided to construct a loop or avoiding line 2½ miles long, whereby trains could run straight through, thus effecting substantial economies and providing an accelerated service to the north and Portrush. This work had been carried out in collaboration with the Government of Northern Ireland as an unemployment relief scheme.

The new line, which had a continuous gradient of 1 in 75, involved heavy earthworks. It crossed over several public roads, and all bridges, both under and over, had been carried out in reinforced concrete. About three-quarters of a mile beyond the commencement the old line was carried across a glen by means of two 20 ft. span masonry arches. This glen is about a quarter of a mile beyond the junction between the new loop line and the branch line to Larne Harbour. It was necessary to carry four pairs of rails across it. The new double track main line viaduct is about 200 ft. up-stream from the old viaduct, and, crossing at an angle, involved a viaduct structure about 630 ft. long. At the Belfast end of the structure the down line to Larne Harbour passed underneath the main line, and crossed the glen between the old and the new main line viaducts, converging towards the former. The second viaduct is about 400 ft. long, and was known as the Down Shore Viaduct. The Up Shore line from Larne Harbour was carried on the existing masonry arches. The under-crossing at the Belfast end of the main line viaduct had a skew angle of 16 deg., and was also constructed in reinforced concrete.

The profiles of the arches of both the new viaducts were similar, but the width of the arch ring, the number of arches and height of the piers were different. The Down Shore viaduct consisted of one main open spandrel parabolic arch with 89 ft. clear span and 30 ft. rise, flanked on either side by three small filled spandrel arches of 35 ft. clear span and 11 ft. 6 in. rise, while the main line viaduct had three similar arches, with five small arches at the Derry end, and at the Belfast end two small arches, which connected with the under-crossing.

The Down Shore Viaduct, which carried a single pair of rails, was straight; the rail level was horizontal, and was about 40 ft. above the level of the stream. The arches were 17 ft. wide. The Main Line Viaduct was on a 60-chain curve and a rising gradient of 1 in 75. The large arches had a maximum height of 70 ft. above stream level. This viaduct carried a double line, and the arches were 29 ft. wide. The small piers were similar to those on the Down Shore Viaduct, except that they were much taller and much more heavily reinforced. They were supported on spread footings, 22 ft. by 35 ft., which were carried down to bearings on good boulder-clay. As this viaduct was on a curve, and it was desirable to have the opposite springings for each arch parallel, the piers were made trapezoidal. The large piers were built of mass concrete, and were supported on spread footings, 35 ft. by 39 ft., resting on boulder clay overlying firm sand. The piers at either end of the large spans were constructed on abutment piers.

Both structures had been designed to the British standard load for railway bridges (18 units), together with the standard impact allowance. The working stress in the concrete was 750 lb. per square inch in compression and 75 lb. per square inch in shear. The reinforcement was round mild steel to British Standard Specification No. 15, 1930, and designed for a working stress of 18,000 lb. per square inch. The total quantity of concrete involved was about 17,000 cubic yards.

It was decided to leave the concrete as it come from the forms, with board marks visible. On the larger piers these boards were 8 in. wide, and on the smaller 6 in. wide, and horizontal chases were inserted at 4 ft. intervals. Advantage was taken of this to have the construction joints occurring at those points. The result has been a structure singularly free from the defects associated with these. The piers were too irregular to make it economical to use standard steel forms, and, in any case, these would have had to be lined to give the effect desired, so timber was used throughout.

The total cost of the job was slightly over £65,000. The whole of the work was carried out by the railway company by direct labour, which was recruited from the local labour exchange, and, except for the construction of the smaller bridges, none of the men employed, including the foremen, had any experience of this class of construction. The work was normally carried out in one eight-hour shift, but, when it was not possible to pour the quantity of concrete required by one shift, overtime was worked, as it was not considered desirable to introduce a second shift.

Excavation for the first piers was commenced in February, 1932, and the Down Shore Viaduct was finished in August of the same year. Owing to the connections not being ready, it was not open to traffic until May of the present year. It had been under traffic since that date, and no deflection or any defects had been noticed during that time. Excavation for the piers of the Main Line Viaduct was commenced in June, 1932, and the work was finished in April, this year. The Viaduct had been used by the ballast trains since that date, and there was no sign of any cracking or any other movement.

# A.A. HOLIDAY SKETCHES

DURING the holiday period, architects drop the tee and set-square and the eighth-scale and take up the brush, pen and pencil, and some of their efforts are on view at the premises of the Architectural Association, in Bedford-square. Amongst the 150 exhibits some good work is to be seen, but mention of a few can only be made. No. 24, "Sandgate," by Mr. A. W. Warland, is a most pleasing subject—an old weather-boarded house, in the front of which is a gaily-coloured ship's figure-head, which adds a pleasing brightness to the picture. A subject worth exploiting—No. 25, "Chipping Campden," by Mr. J. V. Nisbet—is a freely-pencilled-in drawing, colour washed, but lacking perspective value. No. 33, "Clovelly," by the same artist, is an unusual view of a well-known subject, taken from the cliffs, and is quite an interesting water-colour. No. 37, "Peacock Inn, Rowsley," by Mr. J. M. Clarke, is a pleasing little pencil drawing, colour washed, and handled with an understanding of the subject. Mr. J. R. Leathart's drawings, No. 113, "Tithe Barn (1531), Boston, Norfolk," and No. 131, "Edingthorne Church, Norfolk" (see page 731) are two quiet little coloured chalk drawings, drawn in a sympathetic manner and conveying the character of the work and material. No. 107, "Ely" (page 730), by Mr. Myerscough-Walker, is a free pen-and-wash drawing, an impression of sunlight and shadow, which the artist has succeeded in showing effectively. No. 132, by Mr. A. W. Kenyon, "A Yarmouth Lane," is a free outline charcoal drawing, which might have been carried further. No. 43, by Mr. R. H. Macartney, entitled "A Street in Florence," is another sunlight-and-shadow drawing, handled with surety and making a striking picture. No. 141, by the same artist, "San Spirito, Florence," a fine interior, in black chalk, is a big subject drawn with vigour. Mr. P. J. Westwood, in No. 57, exhibits a drawing of the "Lion Brewery"—an interesting subject well worth recording. Mr. C. Lovett Gill's (No. 86) "Horsey Corner," a water-colour drawing, conveys an impression of having been made on the spot; it is a pleasing study. Amongst other well-known exhibitors are Mr. Claude Flight, Mr. A. B. Knapp-Fisher, Mr. D. H. Beaty-Pownall, and others. Mr. G. W. Flower exhibits two carved heads in wood, "A Female Head" and "A Male Head." On looking at these carvings one's mind goes back to a recent exhibition of Egyptian relics at the A.A., amongst which was a magnificently sculptured head, with which those at the A.A. form but a poor comparison. There is often character in heads devoid of classic features, but these are lacking in such interest.

The exhibition remains open until November 22.

# NEW YORK REGIONAL PLAN

THE New York Regional Plan Association has just issued an interesting report which makes it clear that the group of citizens responsible for the plan are not letting the grass grow under their feet. The document is a report of four years' progress on the regional development of New York and its environs, with a programme of present needs and opportunities. It is dedicated to Dr. Thomas Adams, "under whose guiding genius the plan of the New York region was made." After detailed study, this plan was drafted in 1928, and published in several descriptive volumes issued in 1929 and 1931.

As several States were involved, the plan as a whole could have no official adoption, and for its realisation depended upon the common sense of the proposals and the support of public-spirited citizens. It was formulated merely as a guide for the growth of the region during the next forty years.

According to this latest report, "it may now be conservatively stated that progress to date is such that, if it continues at the same rate, the whole of the proposals of the plan for physical improvements will have been carried out before the forty years have elapsed." This is a remarkable proof of what can be accomplished by community of effort. In spite of the economic blizzard which has been raging in the United States, the plan is running on scheduled lines. Dr. Adams, for example, advised the provision of express highways to carry all types of vehicles and to be devoted to long-distance traffic, free as far as possible from interference by slower traffic. Only 3½ miles of such highway existed in the New York region five years ago, and by this year 106 miles have already been built.

Much care has been taken to protect the borders of main highways, for it is recognised that a highway cannot qualify as an express route unless traffic flows freely on it. Ribbon development is therefore prohibited, for according to the report the lack of such protection may result ultimately in decreasing the efficiency of the highway from one-half to two-thirds of its capacity.

It is interesting to learn from the report that in New York, as in this country, a campaign is in progress against slums, which are called "blighted areas." The first essential in the campaign is "The preparation of a plan for the area, providing satisfactory streets, transportation facilities and open spaces for its best ultimate use." The second essential is "that public authorities and private owners should co-operate towards the realisation of the plan for rehabilitating the blighted areas."

The Regional Plan Association is advocating the undertaking of further public works on an immense scale as a means towards economic recovery. When it is remembered that the New York plan was prepared by a voluntary group of citizens, it is all the more remarkable that already more than one-tenth of the proposals put forward have been realised.

# LAW REPORTS

KING'S BENCH DIVISION.
(MR. JUSTICE ACTON.)

## ARCHITECTS' ACTION FOR FEES.

### Burnett and Eprile *v.* Chicory, Ltd.

This was an action brought by Mr. Percy Vivian Burnett, F.R.I.B.A., and Mr. Cecil Jacob Eprile, F.R.I.B.A., of 107, Jermyn-street, S.W., to recover from the defendants, Chicory, Ltd., of Newlands, St. Ives, Hunts, £251 12s. for professional fees for preparing and obtaining the approval of plans, preparing full working drawings and specifications and other work incidental to the proposed extension of the defendants' factory. The claim was on the basis of two-thirds of 5 per cent. on the lowest tender (£7,551) on abandoned work.

The defence was that £150 was to be paid to the plaintiffs if the work was not proceeded with, but if the work proceeded the plaintiffs were to be paid on the ordinary scale, the £150 being deducted from the amount then due to them.

After hearing the evidence, his lordship, in giving judgment, said that if the extension work had been carried out the plaintiffs would have been entitled to be paid their fees on the ordinary scale in the absence of any special agreement. There was no agreement until last March, and, unfortunately, the parties differed as to the terms of the agreement. He had no hesitation in accepting the evidence of Mr. Burnett as to the agreement, as the correspondence all pointed to the accuracy of his recollection. There would be judgment for the plaintiffs for the amount claimed, with costs.

His lordship refused an application on behalf of the defendants for a stay of execution with a view to an appeal, saying the case rested on a pure question of fact.

CHANCERY DIVISION. MR. JUSTICE BENNETT.

## ALLEGED NUISANCE FROM BUILDING OPERATIONS.

### Miller *v.* London County Freehold and Leasehold Properties, Ltd.

This case raised an important question as to what amounts to a legal nuisance, and it came before the judge on a motion by the plaintiff, Mr. Jack Miller, the tenant of a flat known as 100, North Gate, Regent's Park, N.W., the landlords being the defendants, the London County Freehold and Leasehold Properties, Ltd., for an interim injunction restraining the defendants, their servants, workmen and agents until judgment or further order, from committing or permitting to be done at their block of flats at North Gate any act or thing so as to cause a nuisance to the plaintiff or his wife by noise or vibration.

Mr. Charles Harman appeared for the plaintiff; and Mr. H. B. Vaisey, K.C., and Mr. Meyrick Beebee for defendants.

Mr. Harman said that the plaintiff paid £460 a year for his flat, and when he went into occupation on October 1, after being away for some months, he was distracted by noises in the flat above, such as hammering, dropping things, and heavy tramping of feet. He complained, and was told that something would be done, but the noise continued during the day, to the serious discomfort of his wife. The noise, in fact, had been going on since August in the flat above, which was being constructed into two flats.

Mr. Vaisey said that the alteration would be completed in a week. The defendants regretted very much the inconvenience to which the plaintiff had been put, but they had done all they could to reduce it, and would continue to do so. He contended, however, that on the authority of a number of decided cases there was no nuisance in law, because it was merely temporary. If what the defendants were doing was a legal wrong, they would never be able to modernise their flats. The principle to be applied to the case was that a person must use his property reasonably, and not merely to injure his neighbour.

His lordship, in giving judgment, said he had no doubt that the noise had interfered with the reasonable and comfortable enjoyment by the plaintiff of his flat, and the question was whether it was in accordance with the law to stop the defendants from causing a noise which was merely temporary, and if what they were doing was commonly done by property owners when making alterations. It seemed to him that he had only to administer the law laid down by his predecessors, and he must come to the conclusion that what the defendants were doing was not actionable on the facts of the case. That was in accordance with the view expressed by Mr. Justice Vaughan Williams in the case of "Harrison *v.* The Southwark and Vauxhall Water Co.," and with the decision of Mr. Justice Joyce in the case of "Clarke *v.* The Bank of England." He (the judge) felt just as Mr. Justice Joyce did, that although he would like to grant the injunction and compel the defendants to act in a reasonable way to their tenants, the law did not allow him to do so. The motion must be dismissed, the costs to be the defendants' costs in the action.

# ILLUSTRATIONS

*Continued from page 736.*

flooring; C. Franklin, Bedford, external bricks; Grovebury Brickworks, Bedfordshire, internal bricks; Niels Larssen, Leeds, gymnastic apparatus; George Jennings (Lambeth), Ltd., sanitary fittings; Coymn Ching and Co., ironmongery; Synclocks, Ltd., Hendon, clock.

### Design for a Royal Landing Stage.

This design subject was set by Mr. E. Guy Dawber for the Landseer Prize (£20) and silver medal of the Royal Academy Schools, 1931, and the successful competitor was Mr. Eric Hartland, A.R.I.B.A., whose design we illustrate this week.

### Manston Cottage Homes.

These cottage homes for the Kent Public Assistance Committee are an outcome of the Local Government Act, 1929, and are to provide additional accommodation where much needed. Each block is designed as a pair of houses, with fourteen children and a foster mother in each home. A day room is provided on the ground floor, with a kitchen of ample dimensions to allow room for giving a certain amount of domestic training. Dormitory accommodation is provided on the first floor, with the foster mother's bedroom in a central position for purposes of easy supervision. These homes are designed to be in keeping with existing houses on the site and with local tradition, the materials being red brick facings, tile hanging to the first floor, and a plain tile roof, all of Kentish origin. The general contractors are Messrs. Reg. Elliott and Co., Ltd., of Margate.

Mr. W. H. Robinson, F.R.I.B.A., is the architect.

### The Queen's University, Belfast: Institute of Pathology.

The Institute of Pathology site is on the east side of the Royal Victoria Hospital, and is connected thereto by an elevated covered way, entering at the south side on the first floor. The main approach is from a new road on the east side connecting up with the Grosvenor-road. The planning of the building is roughly as follows: A central corridor, running north and south, forms a vertebral column which will enable easy connection to be made in the future with projected buildings at the north and south ends. The new building comprises four floors. On the lower ground floor accommodation is found for the library with students' reading room and records adjoining, bacteriology practical classroom for seventy students with preparation room and sterilisers off, cold room, research room, experimental room and toilet accommodation. On the ground floor the planning contrives a lecture theatre for 120, with retiring room, practical classroom and preparation room for 83, museum, demonstration room and administrative offices. The first floor, connected with the main corridor of the Royal Victoria Hospital, contains laboratories for the bacteriological, metabolic and biochemical departments. The remaining portion of the building is covered with a flat asphalt roof giving access to the animal rooms on each side of the approach stairway. The general construction is steel framework, designed so that a further story can be added. The floors are of reinforced concrete and the walling brick with stone dressings and cornices.

The architects were Messrs. Young and Mackenzie, F.R.I.B.A., of Belfast, the consulting engineer being Mr. F. W. Parkinson, M.I.E.E.; the surveyors, Messrs. W. H. Stephens and Sons, and the general contractors Messrs. F. B. McKee and Co., Ltd., of Belfast. The electric wiring contract was carried out by Messrs. W. Coates and Son, Ltd., of Belfast, and the heating by Messrs. Musgrave and Co., Ltd., of Belfast.

# OBITUARY

### Mr. W. H. Stacey, B.Sc., A.M.Inst.C.E.

We regret to announce the death, on October 29, of Mr. W. H. Stacey, B.Sc., A.M. Inst.C.E., a director of Messrs. Holloway Bros. (London), Ltd. Mr. Stacey, who was a civil engineer of wide experience, was associated during his professional life with works of considerable magnitude. He started his career with Messrs. John Aird and Co., who constructed the original Assuan Dam for the Egyptian Government. During the time Mr. Stacey was with Messrs. Aird, he was engaged on the construction of the Avonmouth Docks, the wet dock and wharves reconstruction for the Tanjong Pagar Dock Board at Singapore, and many other important works.

Immediately after the death of Sir John Aird in 1912, Mr. Stacey transferred his services to Messrs. Holloway Bros. (London), Ltd., public works contractors, and in 1918 he became a director of that firm and was a director at the time of his death. While he was with Messrs. Holloway Bros. he was connected with many large works, and was their chief civil engineer in London on their public works contracts. Among other important works with which he was associated was the construction of the East India and London Docks, the reconstruction of the Venesta Works at Silvertown after the explosion, the construction of the London-Folkestone road and bridges, dry and wet docks for Sir William Gray at Seaton Snook (Co. Durham), the Caversham and Reading bridges over the Thames, the new bridge at Berwick-on-Tweed, and the bridge at Hampton Court, which was opened a short time ago. Mr. Stacey was well known as an expert on reinforced concrete, especially from the constructional point of view.

### Mr. Richard M. M. Gunn.

We regret to record the death of Mr. Richard M. M. Gunn, of Glasgow, at the early age of 44. Mr. Gunn began his studies in the office of the late Mr. H. E. Clifford, F.R.I.B.A., of Glasgow. During that period he made rapid strides in his art, and in 1909 he won the Tite Travelling Scholarship. For the past fifteen years Mr. Gunn had acted as chief assistant to Mr. James Miller, R.S.A., of Glasgow. One who knew him well writes as follows: "He was a brilliant and rapid draughtsman; in design he was scholarly and refined; while his knowledge of the practical side of his profession was such as is possessed by few. He loved his work and took great pains with any subject he had to deal with, to achieve the best results down to the minutest detail. For some time past he had been in somewhat indifferent health, which caused considerable anxiety to his friends, but the end came more suddenly than expected. He had a quiet and lovable disposition, with a keen sense of humour, characteristics which endeared him to all who knew him. His untimely death is deeply regretted by a large circle of friends as well as by those who came in touch with him in a business capacity, by all of whom he was held in the highest esteem. He has left a widow and three children."

# COMPENSATION ON TAKING LANDS

BY WILLIAM T. CRESWELL, K.C., Assisted by C. G. ARMSTRONG-COWAN, Barrister-at-Law.

### Compulsory Purchase.

THE power to purchase land compulsorily or injuriously to affect land is given—

(1) By a general Act of Parliament.
(2) By a provisional order or an absolute order made under a general Act.
(3) By a private Act of Parliament.

### (1) By a General Act of Parliament.

Such an Act of Parliament enables the particular body named therein to acquire land compulsorily or injuriously to affect it (that is, injuriously to affect the interests of the owner) for a particular object, subject to certain restrictions. For instance, under section 33 of the Public Health Act, 1925, a local authority has power, by resolution, to prescribe an improvement line for widening a street, after the consideration by the authority of any objections made thereto by any person interested in the scheme; and any person whose property is injuriously affected by the prescribing of the improvement line is entitled to obtain compensation therefor.

### (2) By Order.—Provisional Order.

A provision of an Act of Parliament may be that the promoters of any undertaking must apply to the Government Department named in the Act for an Order conferring the desired powers for compulsory purchase. The applicants must be the parties, whether company, undertakers, commissioners, trustees, corporations, or private persons, empowered to execute such works or undertaking. Such an order is a provisional order only, and the proposed undertaking cannot proceed until this order is confirmed by Parliament.

### Absolute Order.

This calls for procedure similar to the last, except that an order once confirmed by the Government Department concerned constitutes an absolute grant of compulsory powers, and no further compensation by Parliament is required, as under a provisional order.

### Procedure by Order.

Procedure by order is adopted to save the applicants the expense and trouble of proceeding by private Bill. The procedure differs under the various Acts, and each must be referred to and complied with. Certain Acts, for instance, provide for obtaining, by order, powers for the construction of works, and the carrying on of undertakings which involve interference with or injurious affection of some particular land, although no land is actually acquired to be devoted to the undertaking. Most of the Acts which permit of provisional orders being made are so framed that the confirming Act is deemed to be a public general Act of Parliament.

### (3) By a Private Act.

This procedure originates in a private Bill put before Parliament in which *inter alia* authority is required by the promoters that, for the purposes of the undertaking, the acquisition of the particular land required shall be assured to them, either by agreement or compulsorily. Such land when taken for trading or for profit is acquired under the procedure laid down in the Lands Clauses Acts, subject to any modification which may be included in the Act of Parliament which authorises the undertaking. This last Act is termed the "special Act."

It is necessary in the case of local authorities, incorporated or other companies, and all individuals, that they should promote a private Bill involving the compulsory purchase of or injurious interference with land, where this cannot be done under existing statutes.

### Generally.

In general, the promoters of the Bill must show that they have given previous notice of the powers which they are seeking from Parliament, to all persons likely to be affected thereby, so that such affected parties may have full opportunity of bringing their objections before Committees of both Houses of Parliament when the Bill is being considered by them. The Bill must pass both Houses of Parliament and receive the Royal Assent before the undertaking can be proceeded with.

A limit of three years is usually imposed in which the promoters may exercise the rights of compulsory purchase of the lands they have gained authority to acquire. In some cases a further time limit is imposed in which to execute the necessary works.

In all notices to owners, the Act under which the power to take land has been acquired must be referred to. When promoters have acquired powers to take land for all the particular works, this means for what ever works are necessary for the undertaking. For instance, power to construct a railway includes power not only to lay down the line itself but to construct stations, warehouses, offices, yards, and any other necessary works for completing the railway as a going concern.

In construing a special Act of Parliament, the Courts generally move in favour of the landowner and against the promoters. Land cannot be taken unless it is clear, from the Act, that the promoters are entitled to seek power to do so; and if any attempt is made to use it for any other object, the Court will, restrain those making such attempt by injunction.

If the particular undertaking creates the need for something in relation to which the Act may be said to be ambiguous and to omit any reference, then the Court will not allow any person to take advantage of such ambiguity or omission in order to use these for the purpose of making exorbitant claims for compensation.

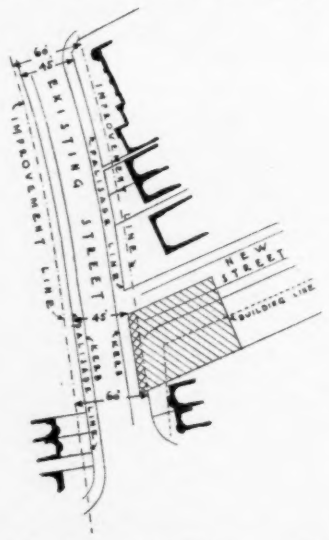
# THE INQUIRY BUREAU

*We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.*
*We do not undertake to reply to inquiries concerning proprietary materials.*—ED.

## QUESTIONS.

### Town Planning Scheme.

SIR,—A corporation has a town planning scheme in operation, approved under the Town Planning Act, 1925, and on the town planning map an existing street is shown to be widened from 45 ft. to 60 ft., the part required for widening, *i.e.*, 7 ft. 6 in. each side, being coloured pink on the map. A plot of land—as hatched on the enclosed plan—has been




purchased subsequently to the approval of the town planning scheme, and a house is being built on it. Has the corporation any right to ask the owner to concede the land required for widening (shown cross-hatched) without any payment? I can find no authority for this in the Town Planning Act, 1925. R.

### Condensation on Glass Roof.

SIR,—There is only one way to overcome the trouble of condensation experienced from exposed glass, and that is, to raise the temperature of the air coming in contact with the glass, so that condensation does not take place. This may be done by blowing warm air over the surface of the glass. If "W. F. D." cares to get in touch with the writer, he will be pleased to answer any questions regarding this.

E. N. BEAVIS.

## ANSWERS.

### Dry Rot in Garage Doors.

[ANSWERS TO "J. G.," NOVEMBER 4.]

SIR,—There is no doubt that in such a position the infection must have been in the wood when first fixed, and has subsequently developed. Such infection is extremely difficult to detect, if it is indeed possible at all, and unless it could be shown that the contractor used, and was aware that he was using, defective timber, his obligations under any normal maintenance clause have long since ceased.

MAINTENANCE.

SIR,—The fact that the doors have given trouble due to swelling during wet weather points to the paint film not having been continuous. Possibly the top, bottom or sides of the doors have been either not painted or insufficiently painted, which has allowed moisture to enter the wood. Unseasoned wood may have been partly the cause of the trouble, but the rot seems to have been unaccompanied by warping or cracking, which usually occur with damp wood. The attack would seem to be due to some insect pest which was probably contained in the wood originally. The doors should be burned, and any adjacent woodwork tested for similar deterioration. Rotting due to dampness would not cause failure in so short a time, but if combined with insect attack it would.

W. E. W.

### Design of Bacon Factory.

[ANSWER TO "OLD READER," NOVEMBER 4.]

SIR,—Your correspondent should apply either to the Ministry of Health or to H.M. Stationery Office for the necessary literature. The details he asks for, however, depend entirely upon the size and situation of the factory. I should recommend a tour in Denmark as a useful education in the subject, and no doubt the Architectural Association would put him in touch with Danish architects who would be glad to help him in his travels.

TRAVELLER.

### Defective Ceiling.

[ANSWER TO "G.R.," NOVEMBER 4.]

SIR,—Keene's must be applied to a cement backing. Trouble is inevitable if it is applied to a lime backing, the action of which continues months after it has apparenlty set. Some say that Keene's can be safely applied to a lime plaster which has been gauged in cement, but this is doubtful, and does not in any case apply to this case. Your correspondent must strip the undercoating and apply in the proper material, or set in putty.

PLASTER.

### Wire Gauge.

[ANSWER TO "B.," NOVEMBER 4.]

SIR,—The terms are only trade terms established by custom and consent, and there is no statutory terminology applied to these products. The British Standards Institutions are endeavouring to establish agreed standards in all building material and terminology.

STANDARDS.

# THE BUILDING TRADE

## ESSAYS ON BUILDING SUBJECTS—XIX.

By JOHN RAYWOOD

### DEMOLITIONS.—(Continued.)

MANY old buildings situated in rural areas are built of random rubble brought up at intervals to course, or, in some cases, without any attempt being made at coursing, and often the stone is of little value. In such cases there is little to be had by way of salvage that will repay care in pulling down, and it may even be worth while to sacrifice the old timber if the work can thereby be expedited. Often the old timber will be found to have undergone little preparation from the saw, and to be of irregular thickness, and much of it may have suffered from worm or beetle. If the original roof covering was thatch, the timbers are generally misshapen, and though at some time slates may have been substituted, the old timbers may have been left in, and been more or less roughly firred out with packing pieces or blazed with an axe to receive new slating battens. The question that may then arise is whether the quickest way to get the work done would be to strip out any fittings of value, weaken the corners, and then set fire to the remainder. This method cannot, of course, be applied to any but isolated buildings, and when it is considered feasible to adopt it, notice should be given to the police and local fire brigade.

When brick walls can be brought down bodily, the shock of impact with the ground will free a great number of bricks from the mortar, and with a much smaller percentage of breakages than might be supposed. In some cases a fairly well-controlled collapse can be brought about by inserting needles and props composed of old timbers, and, after the walls have been weakened, knocking away the temporary supports with an improvised battering ram. Such work, however, calls for good judgment and much care, for the responsibility is a heavy one. Ordinarily most of the walls will have to be taken down piecemeal. Prior to taking down chimneys the fireplaces should be taken out so that the bricks can be dropped down the flues. All gable tops should then be brought down to purlin level before any of them are taken down to wall plate level. After that, on an ordinary two-story building, the work is usually so comparatively simple and straightforward as to need no further detailed description.

#### Demolition in Small Towns.

The amount of demolition work ordinarily carried out in small towns in any one year does not encourage the setting up in business of specialist house-breakers, and usually such work forms part of the contract for a new building to be erected on the same site. Much shop property is of great age, and the buildings will often have undergone so many minor alterations during their existence as to make the work of pulling down peculiarly dangerous. At one time most shopkeepers lived behind and over their shops; but later, as the business grew, found it necessary to make use of every inch of space that could be made available for trade purposes. As a result, loads which were at one time distributed have become concentrated, and often without sufficient regard to full safety. This necessitates special care in the pulling down, as an apparently small withdrawal of support may have serious consequences.

It is not now proposed to deal with the shoring up of adjoining properties, except to say that the methods to be employed should be thought out in advance of the work, and should be clearly set out in the bills of quantities, and that provisional measurements should, as is laid down, be given. In many instances prudence will dictate the adoption of suitable precautions before anything serving to tie the old building together is disturbed. Often this may be most effectually and cheaply done by introducing a number of temporary tie rods holding together upright timbers placed against the outside faces of front and rear walls. These serve, as it were, to put the old building in cramps, in a more effectual manner, and at less cost, than would adequate raking shores. If horizontal timbers are placed between the upright timbers and the faces of the wall, the tie rods may in some cases be more conveniently placed than would otherwise be the case.

As in small towns shops are often fronted on narrow though busy streets, it would cause much inconvenience if haulage vehicles had always to stand outside for the purpose of being loaded up with the old material. It would also have the effect of slowing up the work, for the rate of pulling down is largely governed by the speed at which the material can be taken away. But when shop-fronts are taken out, vehicles can be entered inside and loaded much more rapidly. This may involve a temporary strengthening of the ground floor over any cellars. If the staircase is centrally situated, the well may give a clear way through all the floors; but, if not, it may be advantageous to trim for and form a temporary well, or, if the premises have considerable depth or width, several of them. Sometimes premises will be served by a back road, and in such a case a one-way traffic system may be adopted, empty vehicles coming in at the front and going out at the back when loaded.

It is usually laid down in the specification that advertisements shall not be displayed on the hoardings. In many cases this is a mistake, for it would often be of great advantage were an independent scaffold (mason's) erected to the full height and completely closed in on the main front with a hoarding. The additional cost would in most cases be more than covered by the rent obtainable from advertisements. If the new building to be erected be of the stock-frame type, it might be quickly roofed in, either temporarily or permanently, and with a full height hoarding this would give protection in bad weather.

A matter requiring early decision is the mounting of a suitable crane. It may be dangerous to rely on upper floors to carry a crane capable of handling anything over, say, half a ton, and in some cases much less. A long-reaching crane centrally situated and mounted on a tall gantry is likely to give very good service in connection with the new work; and where carts must necessarily be loaded while standing in the street, it is almost a necessity for pulling down. Many builders in small towns own a handy crane, but comparatively few have a steel gantry on which to mount it. In large towns, on big jobs, one may see a dozen or more cranes at work, and almost any description of plant can be hired on reasonable terms; but in small towns it does not pay to carry a big plant. At the same time, the cost of a steel gantry, capable of being rapidly put together and as rapidly dismantled, is not so heavy as to put it beyond reach of a builder carrying out a job of this sort. Used for both pulling down and on the new work, it is more than probable that its cost will be saved on the one job, provided the builder already owns a suitable crane. There is no space even to mention the numerous appliances that can be used to advantage; and unless plant is purchased with discretion a builder can soon lock up too much capital in it.

Too much credit should not be given for the old material from the pulling down of shop property. If the cost of cartage can be covered it is usually about as much as can be expected, for fittings of any considerable value will usually have been removed before the contract is let. Some old lead and other metal, plate-glass, and firewood will form the main part of the salvage. If the brickwork has been rendered in cement, it will take much longer to pull it down than is usual with other work, and the bricks will not be worth the cost of cleaning; and if some are cleaned and stacked from other walls, they always seem to be in the way, for, as a rule, they are not suitable for reuse in basement work. It is better to let everything go for what it will fetch than to lumber up the site and impede the progress of the new work.

In many cases it will be found that there are a number of easements to be dealt with which, if not promptly attended to, will impede the progress of the new work. If a builder is held up through no fault of his own, his losses should be made good, but they seldom are in ordinary cases. A man of experience should be able to anticipate troubles of this sort, and avoid delay by bringing them to the attention of the architect at a sufficiently early stage. Great care should be taken to avoid giving unnecessary trouble to adjoining owners, for, apart from the ordinary rules of decent conduct, they are potential customers, and it is bad policy to annoy them. If the pulling down operations lay bare an adjoining owner's wall which is eventually again covered in by the new work, some temporary protection should be given to it if there is any danger of rain being driven through it. If the wall is a party wall which is to be left up and form part of the new building, and it is not to be cased with a facing of new brickwork, it may sometimes receive a coat of cement rendering which will serve as a first coat for replastering. In any case, old plastering should be hacked off as the building comes down.

By reason of the alterations mentioned earlier, it may be that chimney breasts will be supported on corbels on party walls. It is necessary to know what is on the other side of the wall, for the adjoining owner may at some time have cut away all projections, and perhaps have considerably weakened the wall. In such event some of it if disturbed may fall out. There are many other points that may want careful attention in connection with party or dividing walls, and in small towns the builder has not the benefit of the advice and watchfulness of district surveyors. The need for caution cannot therefore be overstated.

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### CHINA AS A BUILDERS' MARKET.

THE ninth issue of the China Architects' and Builders' Compendium contains the information that the conflict between China and Japan resulted, as anticipated, in a general slowing up of trade and a temporary cessation of property market transactions. Recovery has naturally been slow, but during the past few months, it is stated, there has been concrete evidence of restored confidence. There is every prospect that normal conditions will again prevail by the end of the year. In city areas, architects and contractors are stated to be busy both with business and residential construction, and the development of old Chinese sites is especially marked; factory construction in the Eastern district is on the top grade also. Foreign and Chinese residential development in the suburbs continues to push the limits still farther out, and, with the settlement of questions pertaining to the outside roads, there should be remarkable expansion in this direction.

The Compendium, which is published at 10s. by the North China Daily News and Herald, Ltd., Shanghai, contains well-indexed general information, of value to merchants, and full technical matter, etc. A directory for architects and a catalogue of building materials, etc., is included.

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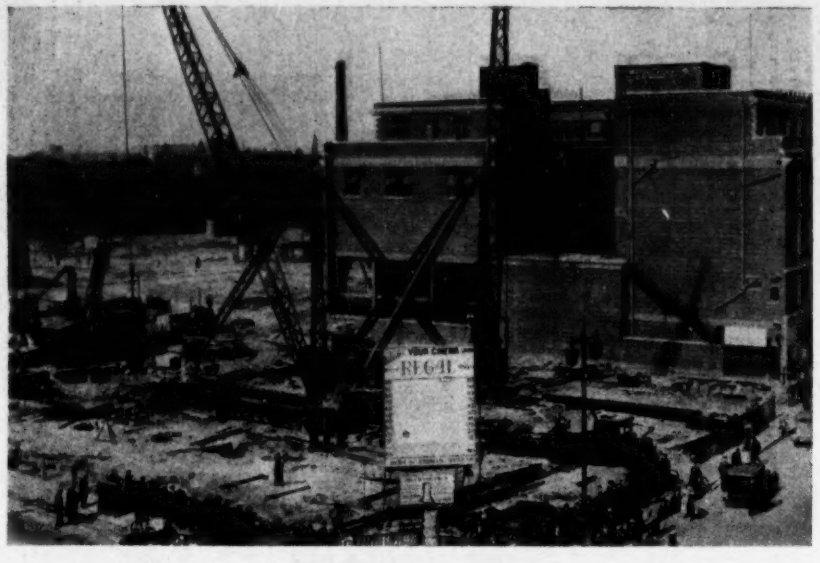
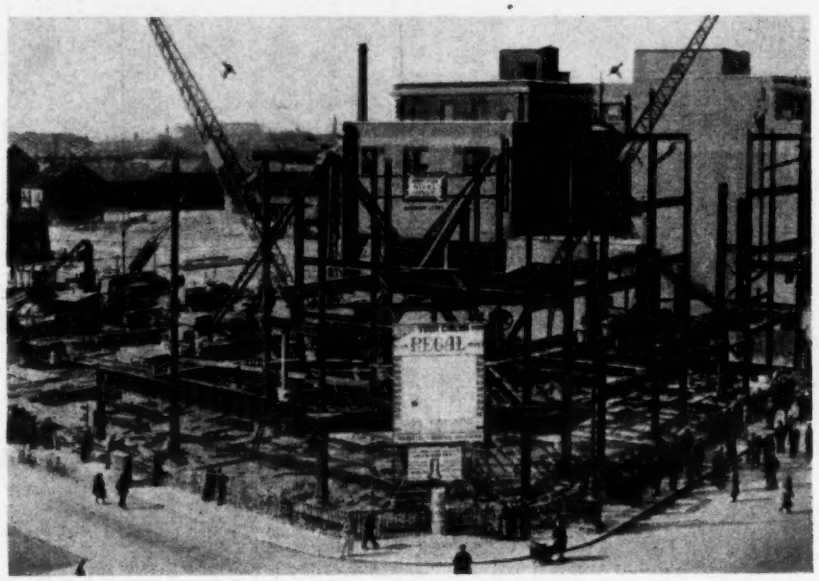
### Borough Polytechnic: New Principal.

The Governors of the Borough Polytechnic have appointed Dr. D. H. Ingall as principal of the Polytechnic, in succession to Mr. J. W. Bispham, O.B.E., M.A., B.Sc., who has been promoted to assistant education officer (Technology) under the London County Council. Dr. Ingall, who took up his duties on October 23, had a distinguished scholastic career, and has had the advantage of considerable practical and teaching experience.




SEPTEMBER 5, 1933.

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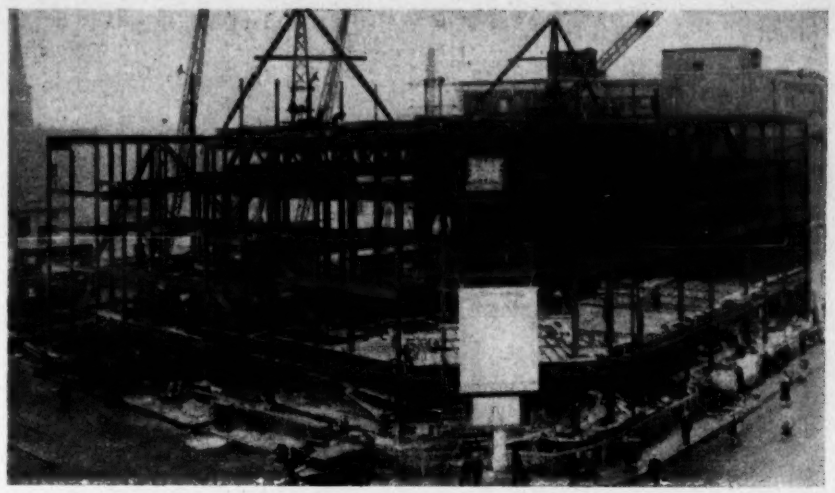


OCTOBER 2, 1933.

OCTOBER 25, 1933.

THE "REGAL" THEATRE, FERENSWAY, HULL: Steelwork Progress Photographs.

MR. ROBERT CROMIE, F.R.I.B.A., Architect. (See Article on page 755.)

# RAPID STEELWORK ERECTION

THE "Regal" Theatre, Ferensway, Hull, now in course of construction, provides a striking example of what efficient co-operation can accomplish. Designed by Mr. Robert Cromie, F.R.I.B.A., of Baker-street, London, the theatre is being built by Mr. Robert G. Tarran, public works contractor, Hull, who, incidentally, is chairman of the City and Suburban Cinemas (Hull), Ltd., the company responsible for its inception.

The site chosen is one of the finest in the city, being between the Paragon Station—terminus of the L.N.E.R.—and the recently erected headquarters of the Hull Corporation Electricity Board on the new and imposing thoroughfare, "Ferensway," the cutting of which, in addition to the improvement due to the slum clearance involved, is a testimonial to the foresight and progress of the Hull Corporation.

The nature of the theatre site made piled foundations and a complete steel frame absolutely necessary, and the design of these was placed in the hands of Messrs. S. W. Budd, chartered civil engineers, of Victoria-street, London.

In June, while the architect's plans were in course of preparation, test piles were driven and loaded, and, as a result, the adoption of the system of the Franki Compressed Pile Co., Ltd., of London and Liverpool, was decided upon. On July 14 a setting-out plan, showing dimensions to all column centres, prepared by the architect and engineers in collaboration, was produced, and as progress had been made with the steelwork design, with the object of determining the loads upon columns at the earliest date possible, the complete piling plan was issued on July 15.

The design of reinforced concrete caps to the groups of piles was then proceeded with, and these were placed in the contractor's hands as prepared, being issued at intervals and in the sequence in which the driving of pile groups was executed.

Owing to one main flank wall of the auditorium abutting upon the Corporation's electricity headquarters, piles directly under stanchions in this wall were impossible, and special cantilevered foundations, with tailing-down to piles subjected to permanent uplift, were designed.

The last of the foundation details were issued on August 25. The inquiries for the structural steelwork were sent out on August 4, and special stress was laid upon the importance of rapidity of execution. Tenders were received on August 14 and opened at a board meeting of the theatre company on that date, when it was decided to place the contract with Messrs. Dorman, Long and Co., Ltd., of Broadway, Westminster, the terms being that the completion date should be October 14, with a penalty and bonus of £50 per day. These terms were accepted by Messrs. Dorman, Long and Co. on August 15, and two days later a complete set of steelwork design plans was handed to them.

The reinforced concrete foundations were completed on September 2, and on that day the first delivery of steelwork was despatched from works, reaching the site two days later. The accompanying photographs (page 754) illustrate the rate of progress.

On October 6 and 7, when all main steelwork had been erected, the engineers made a detailed examination of all connections. At a conference held on the site on October 8, it was agreed by all parties that erection would be completed in all details before close of work on October 10, and, as at least two days' work had been lost through inclement weather, it was decided to fix the date of completion as October 8, thereby agreeing that the structural contractors were entitled to a bonus of £300.

The dimensions of the site are 165 ft. by 150 ft. The auditorium is 138 ft. long and 114 ft. wide, and the theatre seats 1,600 persons on the stalls floor and 990 in the balcony. In addition to the theatre proper, which includes a commodious café and dance floor, there are four shops facing Ferensway and three in the return façade to Collier-street, with four floors over the latter providing waiting foyers, staff and dressing rooms and, in addition, office accommodation on two floors suitable for letting to industrial and commercial undertakings. The total weight of steelwork is 870 tons, which includes the light members for supporting ceilings of auditorium and under balcony.

The detail drawings, which passed through the engineers' inspection in four weeks and three days, numbered 579, and the fact that detailing, fabrication and erection of a steel frame of this character and magnitude were completed in seven weeks and one day from placing of order, or four weeks and six days from the first delivery to site, must, we believe, constitute a record.

# LOANS TO HOUSE BUILDERS

A PROSPECTUS, which details in a clear manner the method by which builders may take advantage of the provisions of the Housing (Financial Provisions) Act, 1933, has been issued by the Halifax Building Society.

Briefly, the object of the Act is to provide cheap money to enable builders and others to erect houses to be let at low rentals to people who are unable to become owners of their own homes under the ordinary building society procedure. Under the scheme the Society is prepared to grant loans, in approved cases, up to 90 per cent. of the valuation, subject to a Government and local authority guarantee, on a thirty years' period, at 4½ per cent. interest in London and the Southern Counties (including Bucks, Berks, Cornwall, Dorset, Devon, Essex, Glamorgan, Gloucester, Hants, Hertford, Kent, Middlesex, Monmouth, Oxford, Surrey, Sussex, Somerset and Wilts), and 4 per cent. elsewhere. It should be emphasised that the new provisions are limited to the building or acquisition before occupation of new houses intended to be let to persons of the working classes.

### Procedure.

The procedure to be followed under the Act is that a builder or other person, or any organisation such as a housing company or society desiring to build houses under the Act will (after securing a site or an option on the same) approach the building society from which they desire to obtain financial assistance. Except in special circumstances, proposals should not be for lots of less than 12 houses. The building society will enter into discussion of any proposed scheme at an early stage and while proposals are in a fluid and formative state. Before any definite scheme can be submitted to the Minister of Health, the local authority and the building society will require to have a plan of each type of house proposed to be erected, a plan of the lay-out, and details of the cost. The building society will, in accordance with the usual practice, inspect the site and examine the plans and specifications of the proposed houses. In regard to the types of houses, it must be borne in mind that (save with the consent of the Minister) any house to be approved under the scheme must not be less than the statutory area fixed by Section 92 (2) of the Housing Act, 1925, namely, (*a*) in the case of a two-storied house, 620 superficial feet, or (*b*) in the case of a structurally separate and self-contained flat or a one-storied house, 550 superficial feet; and must not exceed 800 superficial feet in the case of a three-bedroomed house, or 700 superficial feet in the case of a two-bedroomed house. Unless the Minister specially approve and his dispensation has been obtained by the local authority, the density of the houses on any particular site must not exceed 12 to the acre, and each house must contain a fixed bath.

### General Observations.

Preliminary particulars of any proposal should include particulars of the estimated cost per house, the superficial floor area, the density per acre, and the net weekly rental, also a plan showing the type of house and a plan of the lay-out, and situation of the land. If preliminary approval is given by the directors, the applicant will be asked to pay the survey fee, in accordance with the scale of charges, whereupon full investigation will be made by the Society's surveyors and a detailed report prepared for the guidance of the Society and the local authority. When an advance has been agreed, the Society will correspond with the local authority with a view to obtaining the approval of the local authority and the guarantee on completion. The local authority will require, so far as possible, that the houses to be provided are well laid out and of good design, and have regard to the beauty of the landscape or countryside and other amenities of the locality. With this object in view the Society would draw the attention of builders and investors to the advantages to be derived from the employment of qualified architects to design the houses.

The prospectus from which we quote includes a model form of guarantee, and examples of repayments under the scheme. From these it appears that, for a scheme of 100 houses at an inclusive cost of £300 each, within a 4 per cent. area, the repayment of capital with interest amounts to 6s. per house per week over a period of 30 years. Maintenance; repayment of, and interest upon, the remaining 10 per cent. of the capital put up by the promoter; and profit, if any, have to be added. The repayments of capital and interest to the Society on a £400 house in London (part of a scheme of 500) at 4½ per cent. interest is 8s. 6d. per house per week.

# COMMERCIAL MOTOR SHOW

At this exhibition, which is open at Olympia, W., until November 11, Morris Motors, Ltd., show three interesting exhibits, comprising the handy 5-cwt. van, the popular 8-10-cwt. light van, and a Morris 10 four-travellers' saloon. The 5-cwt. van, which has been on the market for some years, has the addition of 3 cu. ft. capacity in a smart new body, with more attractive lines. This, among other refinements, allows of a petrol filler on the near side, a very valuable feature when refuelling in congested areas. The internal capacity now totals 51 cu. ft., and the efficient 8-h.p. side-valve engine permits a load of 5 cwt. to be transported at a very high average speed. The van will cover 45 miles to the gallon of petrol under ordinary running conditions, with full load, and is light on tyres. It costs £112 10s. in blue, black, brown or green, and £110 in shop grey. The other van, the 8-10-cwt., shows many interesting developments for the coming season. A total capacity of 75 cu. ft. is given. This van is priced from £160.

Vauxhall Motors, Ltd., show, on Stand 23, seven styles of Bedford trucks with carrying capacities ranging from 8 cwt. to 2 tons. Of these the contractor will be especially interested in the 30-cwt. van and the 2-ton short-end tipper. The latter is not a mere adaptation of a lighter chassis strengthened for 2-ton work, but is a genuine 2-tonner, engineered specifically for heavy duty work. The frames are heavily constructed with deep side members, and well cross-membered. The chassis is fitted with full-floating rear axles, which mean real dependability. The 27-h.p. six-cylinder Bedford truck engine develops ample power for dealing with a big load under the most adverse conditions. The 2-ton long lorry is also worth close inspection. Other exhibits made by Vauxhall are the Bedford 2-ton short lorry with articulated six-wheeler attachment (Stand 82); the Bedford 2-ton lorry with rigid six-wheeler attachment (Stand 107); and the Bedford 2-ton short hydraulic 3-way tipper (Stand 27).

# NEW CINEMAS

**BERKHAMSTED.**—Messrs. Shipman and King, 26, Charing Cross-road, W.C.2, are to rebuild their cinema at Berkhamsted, to seat between 1,100 and 1,200 persons. Plans have been prepared by Messrs. Howis and Belcham, 9, Fenchurch-street, E.C.3. Specifications are now being prepared.

**BIRMINGHAM.**—Two new cinemas are proposed in Birmingham by the "Odeon" syndicate controlled by Mr. Oscar Deutsch, 39, Temple-row, Birmingham. The first of these two houses will be erected at Wolverhampton-road and Hagley-road; the second at Solihull-lane and the main Stratford-road. The cinemas, which will seat 1,500 and 1,250 persons respectively, have both been designed by Messrs. Satchwell and Roberts, LL.R.I.B.A., 6, New-street, Birmingham, and will be erected by Messrs. B. Whitehouse and Sons, 247, Monument-road, Birmingham.

**BOGNOR.**—The Odeon Circuit, 39, Temple-row, Birmingham, are to erect a second cinema at Bognor Regis, to seat 1,500. It is understood that this is additional to the circuit's proposed cinema and flats in London-road, Bognor, for which Messrs. Whinney, Son and Austen Hall, 47, Norfolk-street, W.C.2, are architects. Plans for the second house will be prepared by Mr. George Coles, F.R.I.B.A., 40, Craven-street, Strand, W.C.2.

**HUDDERSFIELD.**—The Savoy Cinema (Skelmanthorpe), Ltd., Hill Crest, Woodhouses, propose a cinema on Commercial-road, Skelmanthorpe. Accommodation is for 980 persons. The architect is Mr. A. W. Painter, L.R.I.B.A., 46, Wallgate, Wigan, and the contractors Messrs. J. Wimpenny and Co., Ltd., Spurn-point, Milnsbridge, Huddersfield.

**KENTON, MIDDLESEX.**—Mr. George Coles, F.R.I.B.A., 40, Craven-street, Strand, W.C.2, is architect for a 1,500-capacity cinema at Kenton, for the Odeon Circuit, 39, Temple-row, Birmingham. No contract is let.

**KILMARNOCK.**—Scottish Cinema and Variety Theatres, Ltd., 105, Vincent-street, Glasgow (a subsidiary company of Associated British Cinemas, of London), are to reconstruct the King's Theatre, Titchfield-street, to seat 1,900 persons. Plans are to be prepared by Mr. C. J. McNair, L.R.I.B.A., 112, Bath-street, Glasgow.

**NEWCASTLE-ON-TYNE.**—A contract for the proposed 1,650-capacity cinema at Shield's-road, Byker, for Messrs. Black (Byker) Theatres, Ltd., has been let to Mr. H. Waller, Back Waller-street, Newcastle-upon-Tyne. The architect is Mr. E. M. Lawson, 19, Ridley-place, Newcastle.

**NEWTON ABBOT.**—The local magistrates have provisionally approved plans for a cinema in Wolborough-street. Application was made by Mr. W. C. Gilley, Newton-road, Torquay. The plans will be prepared by Mr. Howard Williams, 2, St. Andrew's-place, Cardiff.

**NORTH SHIELDS.**—Mr. W. Stockdale, 72, Howard-street, North Shields, is preparing bills of quantities for the rebuilding of the "Cinema Royal" as a theatre.

**PAISLEY.**—Mr. C. J. McNair, L.R.I.B.A., 112, Bath-street, Glasgow, is preparing plans for the erection of a cinema to seat 2,000 in Lady-lane and the High-street. The cinema will be for Scottish Cinema and Variety Theatres, Ltd., Glasgow.

**WATERLOO, LANCS.**—A large new cinema is proposed to be built on a site in Crosby-road North, Waterloo, for Mr. Robert Duncan French, 14, North John-street, Liverpool. Plans are to come before the County Justices next week. Mr. A. Ernest Shennan, F.R.I.B.A., 14, North John-street, Liverpool, is architect.

**WEALDSTONE.** — Odeon (Wealdstone), Ltd., 39, Temple-row, Birmingham, is to erect a cinema to seat 1,500 persons. The contract will be carried out by Messrs. Walter Taylor (Builders), Ltd., 130, Butler-road, Harrow, to plans by Mr. A. Percival Starkey, Westminster Bank-chambers, Harrow.

**WHITLEY BAY.**—Mr. T. Fryall, of the Grand Theatre, Frodsham, proposes a cinema in Broadway. The architects are Messrs. Percy L. Browne and Son, Pearl Buildings, Northumberland-street, Newcastle-on-Tyne.

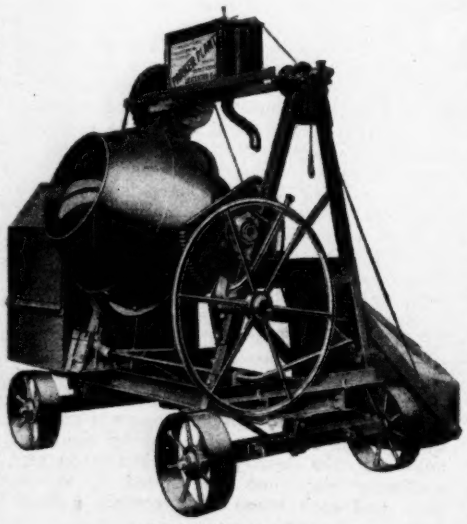
# PUBLIC WORKS EXHIBITION

THE Public Works, Roads and Transport Exhibition, 1933, opens on Monday next at the Royal Agricultural Hall, Islington, N., under the presidency of Sir E. Hilton Young, G.B.E., M.P. (Minister of Health). A most successful congress is anticipated, to which representatives of all the principal local authorities throughout the kingdom are expected as delegates. The exhibition of plant and material is a large and comprehensive display. We append notes on some of the more interesting stands :—

Messrs. BLAW-KNOX, LTD., have arranged a display of their products in the GILBEY HALL, STAND No. 165A. Most of the exhibits comprise entirely new equipment. Of especial interest is the Blaw-Knox "Batcher-plant," with "Agremeter," for proportioning aggregates by weight. This is an important advance in concrete-making plant, in view of the fact that more careful proportioning of the aggregates and weight measurement is now becoming general practice. The company has also anticipated what appears to be the fact that in the immediate future considerable progress will be made in the manufacture and sale of ready-mixed concrete. Messrs. Blaw-Knox, Ltd., have developed the truck mixer and a 1-cu. yd. "Trukmixer," mounted on a Ford chassis, is exhibited. It is claimed to be the first time this equipment has been exhibited in this country. Steel shuttering, steel road forms and high-speed concrete mixers are also on show.

Messrs. R. H. NEAL AND CO., LTD., are exhibiting on STAND No. 56, MAIN HALL, a comprehensive selection of their range of "Rapid" cranes. One of the most interesting is a new 1-ton fully-mobile road-wheel model with full-circle slewing. This crane has been produced to fill the gap between the 12-cwt. size and the 2-ton road model which has proved popular. It is rated to lift 1 ton at 8 ft. radius, and the 16-ft. long jib can be derricked out to lift 15 cwt. at 10 ft., and 10 cwt. at 12 ft., or 7½ cwt. at 15 ft. radius. The power unit consists of a type-Y Ford industrial petrol engine, but a "Lister" diesel or electric motor may be fitted if desired. Another 1-ton model is shown, which is mounted on rail wheels, and in addition to the above, there is a 2-ton Neal's "Rapid" mobile crane, mounted on caterpillar undercarriage. Other plant includes the "Rapid" tubular mast platform-hoist, which is suitable for high buildings and heights up to 250 ft. The particular advantage of this type of hoist is that the platform may be turned 180 deg. into the building at any height up the mast, and not only at the top as with many similar types. The tubular mast is very easy to erect.

Machinery for making concrete for buildings, mass-concrete and roads, is shown by

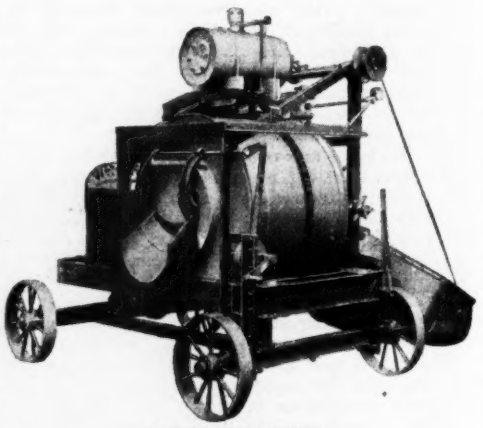


THE PARKER D-MIXER.

Messrs. FREDERICK PARKER, LTD., on STAND 64. A principal exhibit is the "Kubit" stone-breaker, which introduces a new principle in stone-breaking, resulting in chippings of an exceptionally cubical character. This breaker is made in four sizes up to 60 tons per hour output. The "Parker" three-compartment contra-flow washer, well known as a consistent performer of high merit; a multi-bucket excavator; the "Parker" roller-pan mixer; and a wide variety of concrete mixers (of which we illustrate the D-type mixer with loader—a machine having an output of from 45-60 cu. yd. per day) complete a display which should be visited by every user of concrete.

Tar-spraying machinery of latest patterns are shown on STAND 65, MAIN HALL, by THE PHŒNIX ENGINEERING CO., LTD. A principal exhibit is a 160-gallon "Phœnix Rapid" tar and bitumen spraying machine, fully equipped with patent spraying pump, hot-air scavenging, jib crane with winch, thermometer and quick-release horse-shafts. Also on view is a "Phœnix Rapid" 160-gallon tar and bitumen boiler, mounted on mobile trailer chassis, with solid rubber-tyred wheels. Other plant includes a road drying and patching outfit, a hand sweeper, and a 4-in. diaphragm power pumping outfit, with 2-h.p. petrol engine.

The stand of WINGET, LTD., makers of modern concrete plant and machinery, is representative of their comprehensive range and offers for consideration and testing some extremely interesting and important new features. An opportunity is afforded for obtaining information and guidance concerning the



A "WINGET" MIXER.

principle of concrete production by weigh-batching. The purpose of the "Winget" weigh-batching plant is the production of better concrete by means of correct measurement of the fine aggregate. It is felt that its introduction will go far to help in the avoidance of faulty and unsatisfactory concrete. Already, there are several of these plants in use both at home and in Ireland. There is also shown on the stand a wide range of their various types of plant for use in every branch of roadmaking, building and concrete construction. A section of the stand is being devoted to pre-cast concrete machinery, including the automatic concrete-tile machine, which is capable of a minimum output of 1,750 tiles per hour.

Notable among the range of exhibits on STAND 40, by Messrs. RUSTON AND HORNSBY, LTD., is a Ruston 16/20-h.p. loco, fitted with a fuel oil engine. This locomotive is shown on a short length of track, along which it is driven, thus providing an opportunity for contractors, quarry owners, etc., to see the ease with which the gear-changing can be effected. The gear-box provides three speeds in either direction, and is an important factor in maintaining the high overall working speed of the locomotive. The engine is a two-cylinder unit. A crude-oil roller, pumps and pumping plant are other notable exhibits.

# NEW BUILDINGS IN LONDON

ABBEY-WOOD. — CHURCH. — The local Methodist Circuit are to build a new church, at a cost of approximately £3,500. Plans have been prepared by Mr. H. Kelsall Armitage, 8, Blenheim-street, W.1. No contracts have been let yet.

ACTON.—ADDITIONS.—Comprising a reinforced concrete and steel factory is to be built at The Friary, W.3, for Messrs. T. Wall and Sons, Ltd., who have prepared their own plans. The contract has been placed with Messrs. L. and W. Whitehead, Ltd., 169, Clapham-road, S.W.9.

BEDFORD-SQUARE.— ALTERATIONS.— Are to be carried out to the boiler-house, etc., at 34-36, Bedford-square, for the Architectural Association. Mr. L. H. Bucknell, F.R.I.B.A., 104, Great Russell-street, W.C.1, architect.

CATFORD.—ADDITIONS.—Also alterations, including a garage, are to be made to the works of Messrs. James Robertson and Sons, (Preserve Manufacturers), Ltd., Bromley-road, S.E.6. The contractors are Messrs. James Watt (Catford), Ltd., 1, Central-parade, S.E.6. The plans have been prepared by Mr. H. R. Steele, F.R.I.B.A., 14, Gray's Inn-square, W.C.1.

CATFORD.—PREMISES.—Messrs. Shepherd and Thomerson, 80, Queen's-road, Bayswater, W.2, are the architects for new premises at 21, Bromley-road, Catford. The building contract has been secured by Messrs. William Lay and Son, Ltd., 5, Ashmore-road, W.9.

CATFORD.—HOUSES.—Mr. L. A. Culliford, architect, 58, Theobalds-road, W.C.1, has prepared plans for 117 houses on the east side of Thornsbeach-road and Bellingham-road, for Messrs. Tysoe and Harris, Ltd., builders, 196, Perry-hill, S.E.6.

CHADWELL HEATH.—BANK. — Messrs. Barclays Bank, Ltd., Lombard-street, E.C.3, have under consideration the building of a branch bank, for which contracts will be placed at once. The architects are Messrs. Trehearne and Norman, Preston and Co., Windsor House, Kingsway, W.C.2.

CLAPHAM.—FLATS.—The contract for the flats, with a swimming pool, restaurant, club, etc., at South-side, Clapham Common, S.W., will be carried out by Messrs. F. G. Minter, Ltd., Ferry Works, Putney, S.W.15. Mr. H. Kelsall Armitage, 8, Blenheim-street, W.1, is the architect, and the owners are the South-side Estates, Ltd., Ulster-chambers, Regent-street, W.1.

CROYDON.—BUILDING.—The C.B. has passed the following plans:—Chart, Son and Reading, Katharine-street—38 houses and 37 garages, Oak-avenue; S. G. Leathwood, 203, St. James's-road—alterations and additions, Milton Hall, Milton-road; E. J. Harman, 154, King's-road, S.W.3—nursing home, Bridle-road; H. Macintosh, East Croydon—5 shops with 3 flats over, Grange-road, at Kingslyn-crescent; and W. Robinson, 27, Croydon-road—40 houses, Cherry Hill-gardens.

CURZON-STREET. — BUILDING. — Messrs. Henry Tanner, architects, 3, Hanover-square, W.1, have prepared plans for premises for the Hotel Curzon at 56-60, Curzon-street, and 23-26, Bolton-street, W.1. The building contract has not yet been signed.

DEPTFORD.—CLINIC.—The Greenwich B.C. are to purchase a site from the L.C.C. in Creek-road and Willing-street for the erection of an infant welfare centre.

EDMONTON. — FACTORY. — The Times Veneer Co., Ltd., are to build a factory in Angel-road, and have placed a contract with Messrs. A. E. Watson and Co., Chandos House, Palmer-street, S.W.1. The plans have been prepared by Messrs. Ernest Cannell and Son, 52, Holborn-viaduct, E.C.1.

ELTHAM.—SCHOOL.—The L.C.C. has approved the erection of the elementary school in Briset-road, mentioned in our issue of October 27. The school, which is estimated to cost £27,688, will provide accommodation for 800 scholars.

FENCHURCH-STREET.— RECONSTRUCTION. —The L.N.E.R. have accepted the tender of Messrs. F. R. Hipperson and Son, Ltd., 6, Broad-street-place, E.C.2, for the reconstruction of the station buildings, etc. The plans have been prepared by Mr. C. J. Brown, M.I.C.E., Chief Engineer (Southern area), L.N.E.R., King's Cross Station, N.W.1.

GREENWICH.—DWELLINGS.—The L.C.C. has placed a contract with Messrs. Henry Boot and Sons, Ltd., Hayes, Kent, for the erection, at £36,984, of 84 dwellings on the Hughes-fields estate.

GREENWICH.—ADDITIONS.—The L.C.C. has approved additional cubical extent at Pier-wharf, Butcher-row, from plans by Sir Edwin Cooper, A.R.A., 4, Verulam-buildings, Gray's Inn, W.C.1.

HACKNEY.—BUILDING.—Mr. Stanley Hunt, A.R.I.B.A., 101, Finsbury-pavement, E.C.2, has prepared plans for Mr. C. Bluston, builder, who is to erect a building on the site at the corner of Amhurst-road and Aspland-grove, E.

HAYES.—SCHOOLS.—The Hayes and Harlington U.D.C. has received notice from the Middlesex C.C. of their proposal to provide new elementary schools near Hayes End and at Grange Park estate for 100 and 800 children respectively. Mr. W. T. Curtis, F.R.I.B.A., is the County Architect.

HENDON.—EXTENSIONS.—For extensions to the Isolation Hospital in Goldsmith-avenue, N.W.9, the Borough Council has placed a contract with Messrs. Haymills, Ltd., 1, Grand-parade, Wembley Park. Mr. A. O. Knight, Borough Engineer, has prepared the plans, while the quantities are by Messrs. L. A. Francis and Sons, Vernon House, Sicilian-avenue, Bloomsbury-square, W.C.1.

HILL-STREET. — REBUILDING. — Messrs. Lewis Solomon & Son, architects, 21, Hart-street, Bloomsbury, W.C.1, have prepared the plans for the rebuilding of 39, Hill-street, W.1. No building contracts have yet been placed.

ILFORD.—EXTENSIONS.—The L.C.C. and the Essex C.C. are considering a scheme for the extension of the King George Hospital, in conjunction with the governing committee. The cost is expected to be approximately £60,000 to £80,000. Plans will be completed by the hospital architects, Messrs. C. J. Dawson, Son and Allardyce, Clock House-chambers, Barking.

KENNINGTON.—HOUSING.—The L.C.C. recommend £180,000 in respect of the acquisition for housing purposes of the property in the neighbourhood of the Oval.

KENSINGTON.—ADDITIONS.—The governors of the Kensington, Fulham and Chelsea General Hospital have under consideration the building of the remaining portion of their new hospital. The cost will be about £25,000. No contracts have been placed. The architects are Sir Aston Webb and Son, 19, Queen Anne's-gate, S.W.1.

LAMBETH.—HOUSING.—The L.C.C. are to acquire a site at Park-place, Lambeth-road, near the junction of Hercules-road. The buildings on the site are to be demolished and dwellings erected by the L.C.C. with the co-operation of a public utility society.

LEWISHAM. — BATHS. — The Baths Committee of the B.C. has authorised steps to be taken to acquire a site in Durham Hill, Downham, for the provision of swimming baths and public library.

LEWISHAM. — HOUSES.—Messrs. Clutton, estate agents, 5, Great College-street, S.W.1, have prepared a scheme for the erection of 200 or 300 houses at Burnt Ash Hill, Lee, and the proposed South Circular-road, S.W.

MUSWELL HILL.—FLATS.—Messrs. Horace W. Cullum and Co., Ltd., 50, Britannia-street, W.C.1, are erecting two blocks of flats in Connaught-gardens. The architects are Messrs. Bomer and Gibbs, FF.R.I.B.A., 84, Grosvenor-street, W.1. Messrs. Cullum are installing their own new patent soundproof floors.

OXFORD-STREET. — RECONSTRUCTION. — Following the amalgamation of Messrs. John Lewis and Co., Ltd., and Peter Jones, Ltd., an extensive reconstruction scheme will be carried out at the latter's showrooms. Plans are being prepared by Messrs. Slater and Moberley, FF.R.I.B.A., 46, Berners-street, W.1, in conjunction with Professor C. H. Reilly, F.R.I.B.A., of Liverpool. No contracts have been placed yet.

PARK-LANE. — REBUILDING. — Nos. 29-35 are to be rebuilt. The Westminster City Council has approved an application submitted by Mr. G. A. Codd.

PARK ROYAL.—FACTORY.—Messrs. Chamberlain and Willows, 23, Moorgate, have negotiated a deal on behalf of the Sunbeam Electric Co. for the erection of a factory in Park Royal-road, N.W.10.

POPLAR.—HOUSING.—The L.C.C. recommend £17,000 for the acquisition for housing purposes of the Bromley Maltings site, Poplar.

ROSEBERY-AVENUE. — ADDITIONS. — The M.W.B. has recommended £8,000 for the provision of additional accommodation, etc., at the head office building.

SHEPHERD-STREET.—FLATS.—Messrs. W. and E. Hunt, Brettenham House, W.C.2, have prepared plans for a block of flats in Hertford-street, Shepherd-street, and Carrington-street.

SHEPHERD'S BUSH.—DEPOT.—A contract for the foundation for the large depot and offices in Wood-lane, W., for the United Dairies, Ltd., 34, Palace-court, W.2, has been placed with Messrs. John Gill (Contractors), Ltd., Thames House, Millbank, S.W.1. The contract for railway bridge, sidings, etc., has been let to Messrs. Caffin and Co., Ltd., 25, Craven-street, W.C.2. The plans have been prepared by Mr. F. T. Dear, A.R.I.B.A., the company's architect.

SOUTHALL. — HOUSES. — Messrs. Howell and Burgess, Martindale-road, Hounslow, have been accepted by the Southall-Norwood U.D.C. for the erection of 201 houses on the Charity-lane housing site. The plans are by Mr. J. B. Thomson, A.M.Inst.C.E., engineer and surveyor to the Council. The accepted tender price is £60,985.

SOUTHALL.—HOSPITAL.—Tenders are now being invited for a new hospital at the rear of "The Chestnuts," South-road. The architects are Messrs. Bostock and Hollins, 4, South-road, Southall.

SOUTHGATE.—HALL.—The Christ Church Parochial Council have accepted the tender of Messrs. Mattock Bros., Winkfield-road, Wood Green, for their new building. Plans have been prepared by Messrs. C. J. Dawson, Son and Allardyce, Clock House-chambers, Barking. The cost will be about £10,000.

SOUTHWARK.—HOUSING.—The B.C. has accepted, subject to sanction of the M.H. and L.C.C., the tender of Messrs. R. J. Rowley, Ltd., Belmont-avenue, Tottenham, N.17, at £28,478, for the erection of the three remaining blocks of flats on the Doddington-grove site, Kennington, S.E. The plans have been prepared by the Borough Surveyor.

TOLWORTH.—CHURCH.—Messrs. A. and B. Hanson, Ltd., 44, Featherstone-road, Southall, have secured the contract for a new church, etc., in Elgar-avenue, for the Tolworth Congregational Church. The architect is Mr. Percy W. Meredith, F.R.I.B.A., 34, Old Queen-street, S.W.1.

WALLINGTON.—SHOPS.—Messrs. Trotman and Son, of Wallington, have sold the three freehold properties next to the Wallington Council office, and having a frontage to Woodcote-road of about 200 ft., being the last undeveloped land on the west side of the road. The new owners propose erecting on the site an imposing block of eight shops with flats over, together with a super store for Messrs. F. W. Woolworth and Co., Ltd. The building contract is in the hands of the Private Estates Building Co., of Wallington, Messrs. Duncan B. Gray and Partners, of 129, Mount-street, W.1, being the surveyors concerned.

WEMBLEY.—EXTENSION.—Plans for the extension of St. John's Church, Wembley, estimated to cost £2,500, have been prepared by Mr. G. P. Pratt, A.R.I.B.A., 174, High-street, Acton, W.3. The building contract has been placed with Messrs. G. Bollom and Sons, Ltd., 1a, Essex-road, Acton, W.3. All the sub-contracts have been placed.

# RATES OF WAGES IN THE BUILDING TRADE

**AS AND FROM 1st OCTOBER, 1933.**

**[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]**

| | Crafts-men. | Lab-ourers. |
|---|---|---|
| Aberdare | 1/5 | 1/0½ |
| Abergavenny | 1/5 | 1/0½ |
| Aberystwyth | 1/2 | 10½ |
| Accrington | 1/5½ | 1/1½ |
| Aldeburgh | 1/1½ | 10½ |
| Aldershot | 1/2 | 10½ |
| Alfreton | 1/5½ | 1/1½ |
| Alnwick | 1/4½ | 1/0½ |
| Altrincham | 1/5½ | 1/1½ |
| Amble | 1/4½ | 1/0½ |
| Amersham | 1/3½ | 11½ |
| Ammanford | 1/5½ | 1/1½ |
| Andover | 1/2 | 10½ |
| Arundel | 1/2½ | 11 |
| Ascot | 1/3½ | 11½ |
| Ashby-de-la-Zouch | 1/4 | 1/- |
| Ashford (Kent) | 1/2 | 10½ |
| Ashford (Middx.) | 1/4 | 1/- |
| Ashington | 1/4½ | 1/0½ |
| Ashtead | 1/4 | 1/- |
| Ashton-under-Lyne | 1/5½ | 1/1½ |
| Aylesbury | 1/2½ | 11 |
| Aylsham | 1/2 | 10½ |
| Bagshot | 1/2 | 10½ |
| Banbury | 1/3 | 11½ |
| Barnsley | 1/5½ | 1/1½ |
| Barnstaple | 1/3½ | 11½ |
| Barrow-in-Furness | 1/5½ | 1/1½ |
| Barry | 1/5½ | 1/1½ |
| Basingstoke | 1/3 | 11½ |
| Bath | 1/4 | 1/- |
| Batley | 1/5½ | 1/1½ |
| Beaconsfield | 1/3½ | 11½ |
| Beccles | 1/2 | 10½ |
| Bedford | 1/4 | 1/- |
| Berkhamsted | 1/2 | 10½ |
| Berwick | 1/4½ | 1/0½ |
| Beverley | 1/5½ | 1/1½ |
| Bexhill | 1/3 | 11½ |
| Bideford | 1/3½ | 11½ |
| Biggleswade | 1/3 | 11½ |
| Billericay | 1/2 | 10½ |
| Birchington | 1/3 | 11½ |
| Birkenhead | 1/7* | 1/2½ |
| Birmingham | 1/5½ | 1/1½ |
| Bishop Auckland | 1/5 | 1/0½ |
| Bishops Stortford | 1/3 | 11½ |
| Blackburn | 1/5½ | 1/1½ |
| Blackpool | 1/5½ | 1/1½ |
| Blindley Heath | 1/3 | 11½ |
| Blyth | 1/5½ | 1/1½ |
| Bognor Regis | 1/2½ | 11 |
| Bolton | 1/5½ | 1/1½ |
| Bournemouth | 1/4 | 1/- |
| Bracknell | 1/3 | 11½ |
| Bradford | 1/5½ | 1/1½ |
| Bradford-on-Avon | 1/2* | 10½ |
| Braintree | 1/3½ | 11½ |
| Brentwood | 1/5 | 1/0½ |
| Bridgwater | 1/3 | 11½ |
| Bridlington | 1/5 | 1/0½ |
| Brighouse | 1/5½ | 1/1½ |
| Brighton | 1/4 | 1/- |
| Bristol | 1/5½ | 1/1½ |
| Broadstairs | 1/3 | 11½ |
| Bromsgrove | 1/4½ | 1/0½ |
| Bromyard | 1/1½ | 10½ |
| Buckley | 1/5½ | 1/1½ |
| Bungay | 1/1 | 9½ |
| Burnham-on-Crouch | 1/2 | 10½ |
| Burnley | 1/5½ | 1/1½ |
| Bursiem | 1/5½ | 1/1½ |
| Burton-on-Trent | 1/5½ | 1/1½ |
| Bury | 1/5½ | 1/1½ |
| Bury St. Edmunds | 1/2½ | 11 |
| Buxton | 1/5 | 1/0½ |
| Byfleet | 1/3 | 11½ |
| Cambridge | 1/4½ | 1/0½ |
| Canterbury | 1/2½ | 11 |
| Cardiff | 1/5½ | 1/1½ |
| Carlisle | 1/5½ | 1/1½ |
| Carnforth | 1/5½ | 1/1½ |
| Castleford | 1/5½ | 1/1½ |
| Caterham | 1/4 | 1/- |
| Chard | 1/1½* | 10½ |
| Chatham | 1/3½ | 11½ |
| Chelmsford | 1/3½ | 11½ |
| Cheltenham | 1/4 | 1/- |
| Chepstow | 1/4½ | 1/0½ |
| Chertsey | 1/4 | 1/- |
| Chester | 1/5½ | 1/1½ |
| Chesterfield | 1/5½ | 1/1½ |
| Chichester | 1/2½ | 11 |
| Chorley | 1/5½ | 1/1½ |
| Cirencester | 1/2½* | 11 |
| Clacton | 1/3½ | 11½ |
| Cleveleys | 1/5½ | 1/1½ |
| Clitheroe | 1/5½ | 1/1½ |
| Cobham | 1/4 | 1/- |
| Colchester | 1/4 | 1/- |
| Colwyn Bay | 1/4½ | 1/0½ |
| Congleton | 1/5 | 1/0½ |
| Coventry | 1/5½ | 1/1½ |
| Cranbrook | 1/1 | 9½ |
| Cranleigh | 1/2½ | 11 |
| Crawley | 1/3 | 11½ |
| Crewe | 1/4½ | 1/0½ |
| Criccieth | 1/2 | 10½ |
| Crowborough | 1/3 | 11½ |
| Cuckfield | 1/3 | 11½ |
| Darlington | 1/5½ | 1/1½ |
| Darwen | 1/5½ | 1/1½ |
| Daventry | 1/3½ | 11½ |
| Deal | 1/2½ | 11 |
| Denbigh | 1/4 | 1/- |
| Derby | 1/5½ | 1/1½ |
| Devizes | 1/2* | 10½ |
| Dewsbury | 1/5½ | 1/1½ |
| Didcot | 1/3½ | 11½ |
| Diss | 1/2 | 10½ |
| Doncaster | 1/5½ | 1/1½ |
| Dorchester | 1/2½* | 11 |
| Dorking | 1/3 | 11½ |
| Dover | 1/2½ | 11 |
| Dovercourt | 1/3½ | 11½ |
| Driffield | 1/4 | 1/- |
| Droitwich | 1/4½ | 1/0½ |
| Dudley | 1/5½ | 1/1½ |
| Dunstable | 1/2 | 10½ |
| Durham | 1/5½ | 1/1½ |
| Eastbourne | 1/4 | 1/- |
| E. Glam. (Mon. Val.) | 1/5 | 1/0½ |
| East Grinstead | 1/3 | 11½ |
| Edenbridge | 1/3 | 11½ |
| Ely | 1/2 | 10½ |
| Epping | 1/4 | 1/- |
| Exeter | 1/4½* | 1/0½ |
| Exmouth | 1/3 | 11½ |
| Fakenham | 1/2 | 10½ |
| Falmouth | 1/3½ | 11½ |
| Fareham | 1/3 | 11½ |
| Faversham | 1/2 | 10½ |
| Felixstowe | 1/4 | 1/- |
| Filey | 1/4 | 1/- |
| Fleetwood | 1/5½ | 1/1½ |
| Flint | 1/5½ | 1/1½ |
| Folkestone | 1/2½ | 11 |
| Frinton-on-Sea | 1/3½ | 11½ |
| Frome | 1/2½* | 11 |
| Gainsborough | 1/4 | 1/- |
| Gateshead | 1/5½ | 1/1½ |
| Gillingham | 1/3½ | 11½ |
| Glossop | 1/5½ | 1/1½ |
| Gloucester | 1/4½* | 1/0½ |
| Godalming | 1/3 | 11½ |
| Goole | 1/4½ | 1/0½ |
| Gosport | 1/4 | 1/- |
| Grantham | 1/4 | 1/- |
| Gravesend | 1/5 | 1/0½ |
| Gt. Yarmouth | 1/3 | 11½ |
| Grimsby | 1/5½ | 1/1½ |
| Guildford | 1/3 | 11½ |
| Guilsborough | 1/3½ | 11½ |
| Halifax | 1/5½ | 1/1½ |
| Hanley | 1/5½ | 1/1½ |
| Harpenden | 1/3 | 11½ |
| Harrogate | 1/5½ | 1/1½ |
| Hartlepools | 1/5½ | 1/1½ |
| Harwich | 1/3½ | 11½ |
| Haslemere | 1/2½ | 11 |
| Hastings | 1/2½ | 11 |
| Hatfield | 1/4 | 1/- |
| Haywards Heath | 1/3 | 11½ |
| Hednesford | 1/4½ | 1/0½ |
| Hemel Hempstead | 1/4 | 1/- |
| Henley | 1/3½ | 11½ |
| Hereford | 1/3½* | 11½ |
| Herne Bay | 1/2 | 10½ |
| Hertford | 1/4 | 1/- |
| Heysham | 1/5½ | 1/1½ |
| Hitchin | 1/3½ | 11½ |
| Hoddesdon | 1/4 | 1/- |
| Holt | 1/1 | 9½ |
| Horley | 1/3 | 11½ |
| Horsham | 1/2½ | 11 |
| Horwich | 1/5½ | 1/1½ |
| Huddersfield | 1/5½ | 1/1½ |
| Hull | 1/5½ | 1/1½ |
| Hunstanton | 1/2 | 10½ |
| Huntingdon | 1/2½ | 11 |
| Ilfracombe | 1/2½ | 11 |
| Ingatestone | 1/3 | 11½ |
| Ipswich | 1/4 | 1/- |
| Isle of Thanet | 1/3 | 11½ |
| Isle of Wight | 1/2 | 10½ |
| Keighley | 1/5½ | 1/1½ |
| Kenilworth | 1/5½ | 1/1½ |
| Kettering | 1/4½ | 1/0½ |
| Kidderminster | 1/4½ | 1/0½ |
| King's Lynn | 1/2½ | 11 |
| Kirkham | 1/5½ | 1/1½ |
| Knowle | 1/4½ | 1/0½ |
| Lancaster | 1/5½ | 1/1½ |
| Leamington | 1/5 | 1/0½ |
| Leatherhead | 1/4 | 1/- |
| Leeds | 1/5½ | 1/1½ |
| Leicester | 1/5½ | 1/1½ |
| Leighton Buzzard | 1/2 | 10½ |
| Letchworth | 1/3½ | 11½ |
| Lewes | 1/2 | 10½ |
| Lichfield | 1/4½ | 1/0½ |
| Lincoln | 1/5½ | 1/1½ |
| Littlehampton | 1/2½ | 11 |
| Liverpool | 1/7‡ | 1/2½ |
| Llandudno | 1/4½ | 1/0½ |
| Llanelly | 1/5½ | 1/1½ |
| London— | | |
| 12 m. radius | 1/7* | 1/2½ |
| 12-15 m. radius | 1/6½* | 1/2 |
| Long Eaton | 1/5½ | 1/1½ |
| Longton | 1/5½ | 1/1½ |
| Loughborough | 1/5½ | 1/1½ |
| Louth | 1/4 | 1/- |
| Lowestoft | 1/3 | 11½ |
| Luton | 1/4 | 1/- |
| Macclesfield | 1/5 | 1/0½ |
| Maidenhead | 1/4 | 1/- |
| Maidstone | 1/3½ | 11½ |
| Malvern | 1/4 | 1/- |
| Manchester | 1/5½ | 1/1½ |
| Manningtree | 1/2 | 10½ |
| Mansfield | 1/5½ | 1/1½ |
| March | 1/2 | 10½ |
| Margate | 1/3 | 11½ |
| Market Harborough | 1/4 | 1/- |
| Matlock | 1/4 | 1/- |
| Melton Constable | 1/1 | 9½ |
| Melton Mowbray | 1/4½ | 1/0½ |
| Merthyr Tydfil | 1/5 | 1/0½ |
| Middlesbrough | 1/5½ | 1/1½ |
| Middleton | 1/5½ | 1/1½ |
| Middlewich | 1/4½ | 1/0½ |
| Milford Haven | 1/3½ | 11½ |
| Morecambe | 1/5½ | 1/1½ |
| Morley | 1/5½ | 1/1½ |
| Mundesley | 1/2 | 10½ |
| Nantwich | 1/4½ | 1/0½ |
| Newark | 1/4½ | 1/0½ |
| Newbury | 1/2½ | 11 |
| Newcastle-on-Tyne | 1/5½ | 1/1½ |
| Newcastle-u.-Lyme | 1/5½ | 1/1½ |
| New Forest | 1/2½ | 11 |
| Newmarket | 1/3 | 11½ |
| Newport, Mon. | 1/5½ | 1/1½ |
| Newport Pagnell | 1/2 | 10½ |
| Northampton | 1/5 | 1/0½ |
| Norwich | 1/4½ | 1/0½ |
| Nottingham | 1/5½ | 1/1½ |
| Nuneaton | 1/5½ | 1/1½ |
| Oakham | 1/4 | 1/- |
| Oldham | 1/5½ | 1/1½ |
| Ormskirk | 1/5½ | 1/1½ |
| Oxford | 1/4½ | 1/0½ |
| Oxted | 1/2½ | 11 |
| Paignton | 1/4½ | 1/0½ |
| Peterborough | 1/4½ | 1/0½ |
| Plymouth | 1/5½* | 1/1½ |
| Pontypridd | 1/5 | 1/0½ |
| Portsmouth | 1/4 | 1/- |
| Port Talbot | 1/5½ | 1/1½ |
| Preston | 1/5½ | 1/1½ |
| Pulborough | 1/2 | 10½ |
| Ramsgate | 1/3 | 11½ |
| Reading | 1/4½ | 1/0½ |
| Redcar | 1/5½ | 1/1½ |
| Redditch | 1/4½ | 1/0½ |
| Redhill | 1/3½ | 11½ |
| Reigate | 1/3½ | 11½ |
| Retford | 1/4 | 1/- |
| Ripon | 1/4 | 1/- |
| Rochdale | 1/5½ | 1/1½ |
| Rochester | 1/3½ | 11½ |
| Rugby | 1/5½ | 1/1½ |
| Saffron Walden | 1/2 | 10½ |
| St. Albans | 1/4½ | 1/0½ |
| St. Helens | 1/5½ | 1/1½ |
| St. Neots | 1/2½ | 11 |
| Salisbury | 1/2* | 10½ |
| Salisbury Plain | 1/2½* | 11 |
| Sawbridgeworth | 1/3½ | 11½ |
| Saxmundham | 1/1½ | 10½ |
| Scarborough | 1/5 | 1/0½ |
| Selby | 1/5½ | 1/1½ |
| Sevenoaks | 1/3½ | 11½ |
| Sheerness | 1/2½ | 11 |
| Sheffield | 1/5½ | 1/1½ |
| Shipley | 1/5½ | 1/1½ |
| Shoeburyness | 1/4½ | 1/0½ |
| Shrewsbury | 1/4½ | 1/0½ |
| Sittingbourne | 1/2 | 10½ |
| Skegness | 1/4 | 1/- |
| Sleaford | 1/4 | 1/- |
| Slough | 1/4 | 1/- |
| Southampton | 1/4½ | 1/0½ |
| Southend-on-Sea | 1/4½ | 1/0½ |
| Southport | 1/5½ | 1/1½ |
| South Shields | 1/5½ | 1/1½ |
| Spalding | 1/3 | 11½ |
| Stafford | 1/4½ | 1/0½ |
| Staines | 1/4 | 1/- |
| Stamford | 1/4 | 1/- |
| Stevenage | 1/3½ | 11½ |
| Stockport | 1/5½ | 1/1½ |
| Stockton-on-Tees | 1/5½ | 1/1½ |
| Stoke-on-Trent | 1/5½ | 1/1½ |
| Stourbridge | 1/5 | 1/0½ |
| Stourport | 1/4½ | 1/0½ |
| Stowmarket | 1/2 | 10½ |
| Stratford-on-Avon | 1/4 | 1/- |
| Stroud | 1/3½† | 11½ |
| Sunderland | 1/5½ | 1/1½ |
| Sutton Coldfield | 1/5½ | 1/1½ |
| Swaffham | 1/1 | 9½ |
| Swanage | 1/3½* | 11½ |
| Swansea | 1/5½ | 1/1½ |
| Swindon | 1/4* | 1/- |
| Tamworth | 1/5 | 1/0½ |
| Taunton | 1/3½ | 11½ |
| Tenterden | 1/2 | 10½ |
| Tewkesbury | 1/4* | 1/- |
| Thetford | 1/2 | 10½ |
| Thorpe Bay | 1/4½ | 1/0½ |
| Todmorden | 1/5½ | 1/1½ |
| Tonbridge | 1/3½ | 11½ |
| Torquay | 1/5 | 1/0½ |
| Totnes | 1/3½† | 11½ |
| Trowbridge | 1/2½* | 11 |
| Truro | 1/1½ | 10½ |
| Tunbridge Wells | 1/3½ | 11½ |
| Uppingham | 1/4 | 1/- |
| Uttoxeter | 1/3½ | 11½ |
| Wakefield | 1/5½ | 1/1½ |
| Walsall | 1/5½ | 1/1½ |
| Walsden | 1/5½ | 1/1½ |
| Walton-on-Naze | 1/3½ | 11½ |
| Ware | 1/4 | 1/- |
| Warminster | 1/2* | 10½ |
| Warrington | 1/5½ | 1/1½ |
| Warwick | 1/5 | 1/0½ |
| Wellingborough | 1/4½ | 1/0½ |
| Wells (Norfolk) | 1/1 | 9½ |
| Welwyn | 1/3 | 11½ |
| Welwyn Gar. City | 1/4½ | 1/0½ |
| West Bromwich | 1/5½ | 1/1½ |
| Westcliff-on-Sea | 1/4½ | 1/0½ |
| Weston-super-Mare | 1/4½ | 1/0½ |
| Weybridge | 1/4 | 1/- |
| Weymouth | 1/3* | 11½ |
| Whitby | 1/4½ | 1/0½ |
| Whitstable | 1/2 | 10½ |
| Widnes | 1/5½ | 1/1½ |
| Wigan | 1/5½ | 1/1½ |
| Wigton | 1/4 | 1/- |
| Willington | 1/5 | 1/0½ |
| Wilmslow | 1/5½ | 1/1½ |
| Winchester | 1/3 | 11½ |
| Windermere | 1/3½ | 11½ |
| Windsor | 1/4 | 1/- |
| Wisbech | 1/2 | 10½ |
| Witham | 1/2½ | 11 |
| Woking | 1/3½ | 11½ |
| Wokingham | 1/3½ | 11½ |
| Wolverhampton | 1/5½ | 1/1½ |
| Woodbridge | 1/2 | 10½ |
| Worcester | 1/4½ | 1/0½ |
| Workington | 1/4 | 1/- |
| Worksop | 1/4 | 1/- |
| Worthing | 1/2½ | 11 |
| Wrexham | 1/5 | 1/0½ |
| Wroxham | 1/2½ | 11 |
| Wycombe | 1/4 | 1/- |
| Wymondham | 1/1½ | 10½ |
| Yeovil | 1/3* | 11½ |
| York | 1/5½ | 1/1½ |

* Painters, 1d. less than other Craftsmen. † Painters, ½d. less than other Craftsmen. ‡ Plasterers, 1s. 8d.

For Building Trade Wages in Scotland, see page 763.

# CONTRACTS OPEN

For some contracts still open, but not included in this List, see previous issue. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender, that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

*The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.*

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

## BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

### NOVEMBER 10.

**Shirley, Surrey.**—Erection.—Of Elementary school at West-way, for Croydon Corporation. Town Clerk, Town Hall. Dep. £1.

**Waddon, Surrey.** — Erection. — Of elementary school at Goodwin-rd., for Croydon Corporation Town Clerk. Town Hall. Dep. £1.

### NOVEMBER 13.

**Barrow-in-Furness.**—Conversion.—Of stable at Corporation Stoneyard, Ramsden-st., into garage for C.B. B.E.

**Basford.**—Repairs.—To 46, Main-st., Brinsley; and house, occupied by G. T. Rickers, Main-st., Jacksdale, for R.D.C. V. V. Yates, senior sanitary inspector.

**Canterbury.**—Building.—Art gallery and lecture hall at rear of Beaney Institute, and roof repairs to Corn Exchange, for T.C. H. M. Enderby, City S. and E. Dep. £1 1s.

**Chester.**—Painting.—Internal washing down and/or painting of public elementary schools, for T.C. City E. and S.

**Coulsdon and Purley.**—Fencing.—Sanderstead Hill, Sanderstead, for U.D.C. G. A. Ballard, E. and S.

**Edinburgh.**—Installation.—Of low-pressure hot water heating system and of domestic hot water system, for H.M.O.W., 21-24, Queen-st. E., H.M. Office of Works, 122, George-st. Dep. £1 1s.

**Erith.**—Repairs.—At Sanatorium, Little Heath, Belvedere, for U.D.C. H. Hind, E. and S. Dep. £1 1s.

**Farnworth.**—Houses.—18, on Trafford-st. site, for U.D.C. F. Ashton, E. and S. Dept. £2.

**Ipswich.**—Exchange.—Employment exchange, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

**Irthlingborough.**—Houses.—16 semi-detached, non-parlour type, on Allen-rd. estate, for U.D.C. E. Turnbull, S., High-st.

**Keith.**—Houses.—14, for T.C. G. S. Stewart, B.S.

**Kenmare.**—Hospital.—At Kenmare, for County Kerry Board of Health and Public Assistance. J. J. Winters and E. D. Buckley, architects and consulting engineers, 27, Molesworth-st., Dublin. Dep. £15 15s.

**Letterkenny.—Building.—Improvements and additional buildings, for Donegal District Mental Hospital, Letterkenny. C. V. MacLoughlin, architect, Main-st., Letterkenny, Donegal. Dep. £20.**

**Longford.**—Repairs.—To exterior of Longford dispensary residence. May Brady, secretary, County Home

**Meriden.**—Alterations.—And additions to shedding in Council's store yard at Coleshill, for R.D.C. S. Dep. £1 1s.

**Minehead.**—Conversion.—Of mortuary into conveniences at Cemetery, for Burial Joint Committee. A. D. Barron, S.

**Northam.**—Offices.—Council chamber and offices at Windmill-lane, for U.D.C. W. G. Champion, S. Dep. £2 2s.

**Paisley.**—Extensions.—To public library and museum, for Committee. Young, Martin & Sawers, 4, St. Mirren-st.

**Saffron Walden.**—Houses.—6, at Littlebury, for R.D.C. A. E. Pitstow, S., 25, West-rd. Dep. £3 3s.

**Shrewsbury.**—Houses.—24, near Hafren-rd. and the Mount, for T.C. A. W. Ward, B.S. Dep. £1 1s.

**Southend-on-Sea.**—Houses.—122, on Eastwood-lane site, for C.B. Robert H. Dyer, B.E. Dep. £2

**Uxbridge.**—Installation.—Oil-fired heating apparatus at fire station, Vine-st., for U.D.C. E. and S., 263, High-st.

**Welwyn.**—Houses.—36, at Woolmer Green, and 24 at Welwyn, for R.D.C. C. B. Borthwick, S. Dep. £2.

### NOVEMBER 14.

**Huddersfield.**—Wards.—At Royal Infirmary. Calvert & Jessop and Joseph Berry & Sons, associated architects, 1, Market-walk. Dep. £2 2s.

**Leicester.**—Houses.—On Freake's Ground, Fosse-rd. North, for Corporation. Town Clerk, Town Hall. Dep. £1 1s.

**London.**—Flats.—36 flats with shops, for Bell Property Trust, Ltd., 115, Park-st., Mayfair, W.1. Toms & Partners, architects, 115, Park-st., Mayfair, W.1. Dep. £2 2s.

**Milton Regis.**—House.—Club-house, for Conservative Club. Marshall & Harvey, L.R.I.B.A. Dep. £1 1s.

**Pitsea.** — **New Senior School.** — **In Timberlog-lane, for Essex C.C. County Architect, County Hall Chelmsford Dep. £2 2s**

**Tipton.**—Building.—Lodge, with conveniences, at Queen's-rd. entrance to Victoria-pk., and conveniences at junction of Conygree-rd. and Sedgley-rd. East, for U.D.C. H. N. Woodard, E. and S. Dep. £2 2s.

**Yeovil.**—Church.—Erection of St. Andrew's Church. Petter & Warren, FF.R.I.B.A., Old Sarum.

### NOVEMBER 15.

**Belfast.**—Footbridges.—Three reinforced concrete footbridges over Milewater River in Alexandra-pk., for C.B. City S., Room 94, City Hall. Dep. £1 1s.

**Belfast.**—Repairs.—To 99 labourers' cottages, for R.D.C. W. D. R. Taggart, architect, Scottish Provident-bldgs.

**Belfast.**—Painting.—68 labourers' cottages at Whiteabbey, for R.D.C. W. D. R. Taggart, architect, Scottish Provident-bldgs.

**Chippenham.**—Cottages.—Eight bungalow cottages on Woodland housing estate, for T.C. B.S. Dep. £2 2s.

**Harrow-on-the-Hill.**—Painting.—At Eastcote-lane housing estate, for U.D.C. J. P. Bennetts, E. and S.

**Ilfracombe.**—Offices.—Showrooms and offices in High-st. and Northfield-rd., for Gas Company. Whinney, Son & Austen Hall, FF.R.I.B.A., 37, Norfolk-st., Strand, London, W.C.2. Dep. £5 5s.

**London.**—Flats.—Demolition of existing buildings and erection of 9 flats in Adair-rd. and Southam-st., for Kensington B.C. B.E. Dep. £2 2s.

**Newcastle-under-Lyme.**—House.—At Nantwich-rd., Audley, for R.D.C. S. E. Lovatt, clerk. Dep. £1 1s.

**Portsmouth.**—Garage.—Marine garage, Victoria pier, for T.C. R. J. Jenkins, City E. Dep. £1 1s.

**Portsmouth.**—Extensions.—To Municipal aerodrome, for T.C. R. J. Jenkins, City E. Dep. £1 1s.

**Willesden.**—Repairs, etc.—At 15, Denmark-rd., Kilburn, N.W.6, for U.D.C. F. Wilkinson, E.

### NOVEMBER 16.

**Blackpool.**—Shops.—Also offices and houses, for C.B. F. Wood, B.E. Dep. £5 5s.

**Castlebar.**—Extensions.—To existing buildings at District Mental Hospital. P. J. Munden, architect, 28, South Frederick-st., Dublin. Dep. £10 10s.

**Newcastle-upon-Tyne.** — Houses. — 164, on Ferguson's-lane estate, for T.C. A. M. Oliver, T.C. Dep. £2 2s.

**Headcorn.**—Reconstruction.—Of 145 ft. of river wall with steel sheet piling and concrete, and incidental works, at Tramway Depot, Mill-lane, for C.B. B.S. Dep. £2 2s.

***Southall-Norwood.** — Hospital. — Bostock & Hollins, architects, 4, South-rd., Southall. Dep. £2 2s.

**Sunderland.**—School.—On Ford estate, for E.C. O. H. Mark, education architect, 15, John-st. Dep. £2 2s.

**Synone, Co. Tipperary.**—House.—And two outoffices, for Irish Land Commission. M. Deegan, secretary, Upper Merrion-st., Dublin. Dep. £1.

**Uxbridge.**—Demolition.—Of 34 cottages in Occupation-rd. and York-rd., for U.D.C. E. E. T. Bolton, E. and S., 263, High-st. Dep. £1 1s.

**Worcester Park.**—Extensions of, and additions to existing engine house at the sewage works for Sutton and Cheam U.D.C. Clerk, Municipal Offices.

### NOVEMBER 17.

**Altrincham.**—Installation.—Of electricity at Isolation Hospital, for U.D.C. H. E. Brown, S. Dep. £1.

**Banbury.**—Post Office.—For H.M.O.W. Room 65d. Third Floor, H.M.O.W., S.W.1. Dep. £1.

**Bristol.**—Repairs.—To 26, Bishop-st., Bedminster, for Corporation. H. M. Webb, City E., 65, Queen-sq. Dep. £1 1s.

**Grange, Co. Galway.**—Houses.—Four, and four outoffices, for Irish Land Commission. M. Deegan, secretary, Upper Merrion-st., Dublin. Dep. £1.

**Lancaster.**—Rebuilding.—After fire, St. Oswald's Church, Thornton-in-Lonsdale, near Ingleton. Austin & Paley, architects, Castle-pk., Lancaster

**Tregoney.**—Bungalow.—For A. J. Cornelius, architect, Truro.

**West Riding.**—Building.—Caretaker's house at Maltby Hall senior council school, and provision of low-pressure, hot-water apparatus and installation of electric light at new senior school at Shydale-rd., Cudworth, for C.C. Education Officer, County Hall, Wakefield.

### NOVEMBER 18.

**Armagh.**—Alterations.—Also repairs to former Hockley P.E. schoolhouse and its addition to residence of teacher, for E.C. G. H. Mills, architect, Beresford-row, The Mall, Armagh.

**Aston.**—Demolition.—Of Aston Cantlow Mill buildings and two adjoining cottages, for Warwickshire C.C. D. H. Brown, C.S., Warwick.

**Finahy.** — Installation. — Low-pressure hot-water heating installation; internal plumbing and gasfitting; electric lighting installation at new P.E. School at Finahy, for the Lisburn and Belfast Regional E.C. R. Ferguson, architect, 36, Scottish Provident-bldgs., Belfast.

**Kimbolton.**—Fence.—Wooden fence and gates at Kimbolton Grammar School, for Governors. W. A. Lea, architect, 4, Market-sq., Huntingdon. Dep. £1 1s.

**Lochgilphead.**—Houses.—One block containing 5 five-apartment and 2 three-apartment, for T.C. C. C. MacArthur, S., Lochgilphead. Dep. £2 2s.

**Oswestry.** — Shed.—Steel-framed and corrugated iron covered lean-to shed at Smithfield, for T.C. G. W. Lacey, B.E. and S.

**Seaton Delaval.**—Installation.—For electricty to 48 houses, for U.D.C. A Dorin, S.

***Stowmarket.**—Erection of Children's Home at Eastward Ho, for East Suffolk C.C. County Architect, County Hall, Ipswich. Dep. £2 2s.

**Wayland.**—Houses.—4, for R.D.C. A. A. Gompertz, clerk.

### NOVEMBER 20.

**Alterton.**—New Council School.—For Cornwall E.C. S. Pool, A.R.I.B.A., County Architect, County Hall, Truro. Dep. £2 2s.

**Beckenham.**—Fencing.—260 lin. yds. unclimbable wrought-iron fencing, 6 ft. high, with double entrance gates and two single gates, for U.D.C. H. Storr Best, S. Dep. £2.

**Belfast.**—Hall.—Dance and concert hall on Plateau at Bellevue-gardens, Antrim-rd., for C.B. City S. Dep. £3 3s.

**Brixham.**—Houses.—22, on Isolation Hospital site, for U.D.C. R. L. Bridson, E. and S. Dep. £2 2s.

**Broadstairs and St. Peter's.**—Railings.—At Memorial Recreation Ground, for U.D.C. S.

**Chester.**—Demolition.—Of 2, Nicholas-st. and alterations to 4, Nicholas-st., for T.C. Douglas Minshull & Williams, architects, 6, Abbey-sq. Dep. £1 1s.

**Dinnington.** — School. — Senior school and caretaker's house at Dinnington, for West Riding C.C. Education Officer, County Hall, Wakefield.

**Fenit.**—Installation.—Of electric lighting at Fenit Pier, Co. Kerry, for Tralee and Fenit Pier and Harbour Commissioners, Tralee. V. D. Doyle, engineer to Commissioners. Dep. £50.

**Hull.**—Installation.—Electrical installation at waterworks pumping station, Cottingham, for T.C. W. D. Bingham, Water and Gas Engineer, Alfred Gelder-st.

**Hull.**—Alterations.—To telephone exchanges, for Corporation Telephone Committee. D. Harvey, City Architect. Dep. £1 1s.

**Leeds.**—Building.—Conveniences and superintendent's house and office, at Cottingley Hall Cemetery, for T.C. J. E. Acfield, City E.

**Liverpool.**—School.—At Page Moss-lane, for T.C. Land Steward and Surveyor. Dep. £3 3s.

**Liverpool.**—School.—For juniors at Knowsley, for T.C. Land Steward and Surveyor (Architectural Department). Dep. £2 2s.

**Liverpool.**—School.—For seniors at Knowsley, for T.C. Land Steward and Surveyor (Architectural Department). Dep. £2 2s.

**Oldham.**—Handicraft Department.—At Institution, Rochdale-rd., for Corporation. C. T. Taylor, Roberts & Bowman, architects, 10, Clegg-st.

**Portstewart.**—Municipal Buildings.—For U.D.C. B. Cowser, A.R.I.B.A. Dep. £2 2s.

**Swansea.**—Buildings.—Also internal furnishings, at Tir John Power Station, for C.B. Preece, Cardew & Rider, consulting engineers, 8-10, Queen Anne's-gate, Westminster, S.W.1. Dep. £5 5s.

**Thurnscoe.**—Installation.—Of low-pressure hot water apparatus, at new council school, for West Riding C.C. Education Officer, County Hall, Wakefield.

### NOVEMBER 21.

**Dublin.**—Additions.—To two labourers' cottages at Tolka and Dunsoughly, for Board of Public Health. F. P. Russell, Board's Engineer, 15, Parnell-sq., Dublin. Dep. £1 1s.

**Poole.**—Conveniences.—And alterations to cricket pavilion, Poole-pk., for T.C. E. J. Goodacre, B.E. Dep. £1 1s.

**Wallasey.**—Pavilion.—Cricket pavilion, Claremount-rd., for C.B. B.E.

### NOVEMBER 22.

**Belfast.** — Lavatory.—Accommodation at Ulster Hall, for C.B. City S. Dep. £2 2s.

**Dublin.**—Residence.—At Belcamp, Co. Dublin, for R. O'Connell. N. O'Dwyer, B.E., Veritas House, Lower Abbey-st., Dublin. Dep. £2 2s.

**South Cork.**—Hospital.—New District Hospital at Youghal, for County Board of Public Assistance. B. O'Flynn, Board's architect, 60, South Mall, Cork. Dep. £10.

**Southend-on-Sea.**—Staircase.—At Prince George extension of Promenade Pier, for C.B. R. H. Dyer B.E. Dep. £1.

### NOVEMBER 23.

***Cricklewood, N.W.2.**—Erection.—Of flats and houses at Westcroft Farm, for Hampstead Corporation. Town Clerk, Town Hall, N.W.3.

### NOVEMBER 25.

**Edinburgh.**—Heating.—And hot water mains installation, and pipe ducts at Gogarburn Institution, for T.C. City Architect.

**Huyton-with-Roby.**—Houses.—36 non-parlour type at Huyton Quarry, for U.D.C. A. W. Thomas, Architect to Council. Dep. £3 3s.

**London.**—Building.—Stokeholes and incidental work at hospital, for Enfield and Edmonton Joint Hospital Board. Board's Surveyor, 7, Little Park-gardens, Enfield. Dep. 10s.

**Mill Hill, London, N.W.7.**—Erection of semi-permanent school and caretaker's bungalow at Hale-drive, for Hendon Corporation. Town Clerk, Dep. £4 4s.

### NOVEMBER 27.

**Cambridge.**—School.—At Chesterton, for T.C. B.E. Dep. £2 2s.

**Poole.**—Houses.—10, at Browning-rd., Upper Parkstone, for T.C. E. J. Goodacre, B.E. Dep. £2 2s.

**Manchester.**—School.—Erection of Crowcroft Park Municipal School, Longsight, for E.C. Surveyor's Department, Education Offices, Deansgate, 3. Dep. £2 2s.

***Wallington (Surrey).**—Erection of Municipal Offices, Council Chamber, etc., at Woodcote-rd., for Beddington and Wallington U.D.C. Clerk. Dep. £5 5s.

**Yarmouth.**—Public Conveniences.—At Hall Quay, for C.B. B.E. Dep. £2 2s.

**NOVEMBER 29.**

***Salford.**—Erection of Employment Exchange for H.M.O.W. Room 66D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

**NOVEMBER 30.**

***Ealing, W.5.**—Erection.—Of two public conveniences, for Corporation. Town Clerk, Town Hall. Dep. £1.

**Newbury.**—Conversion.—Of 2 cottages at wharf into ambulance station and house, for T.C. B.S.

**DECEMBER 11.**

***Scotton Banks, near Knaresborough.**—Erection of sanatorium, for West Riding and Yorkshire C.C. Clerk, County Hall, Wakefield. Dep. £5.

**DECEMBER 1.**

**Enniskillen.** — Reconstruction.—As constabulary depot, of premises known as Main Military Barracks, for Government of Northern Ireland. Secretary, Ministry of Finance, May-st., Belfast. Dep. £10.

**NO DATE.**

**Bradford.**—Additions.—And alterations, "Spotted House" Hotel, Keighley-rd. Pennington, Hustler & Taylor, architects and surveyors, Pontefract.

**Colchester.**—Houses.—For 36. R. Woodhouse Beales, A.I.A.A., 10, Tower-st., Ipswich.

**Ipswich.**—Demolition.—Of existing work and general clearance of site at 12, Princes-st. H. Hooper & Garrard. AA.R.I.B.A., 4, Butter Market.

**Keynsham.**—School.—For Somerset C.C. A. J. Toomer, County Architect, Park-st., Taunton. Dep. £3 3s.

**Kingston-on-Thames.**—Alterations.—To shop premises, 5 and 5a, Apple Market, for Timothy Whites (1928), Ltd., Construction Dept., 30, Chandos-st., Portsmouth.

**Merioneth.**—House.—Master's house at Gellilydan, near Blaenau-Festiniog, for C.C. N. L. Jones, County Architect, County Offices, Dolgelley.

**Normanton.** — Houses. — 4, at Castleford-rd. J. G. L. Poulson, architect and surveyor, 25, Ropergate, Pontefract.

**Somerset.**—Cottage.—Police cottage at Seven Ash, near Bishop's Lydeard, for C.C. County Architect, Park-st., Taunton.

## MATERIALS, etc.

**NOVEMBER 13.**

**Lincoln.**—Highway Materials.—For T.C. S. C. Baggott, City E. and S.

**NOVEMBER 15.**

**Cleethorpes.**—Sanitary Pipes.—For U.D.C. L. W. Pye, E. and S.

**Manchester.**—Pipes.—For Waterworks Committee. Chief E., Waterworks Offices.

**NOVEMBER 16.**

**Bristol.**—Cement, etc.—For T.C. City E., 65, Queen-sq.

**Wealdstone.**—Tarmacadam.—For U.D.C. P. G. May, S.

**NOVEMBER 18.**

**Somerset.**—Cement, etc.—For C.C. C. M. Quayle, District Surveyor, Ham Down House, Langport.

**West Hartlepool.**—Road Materials.—For T.C. F. Durkin, B.E.

**West Riding.**—Road Materials.—For C.C. C.S., Wakefield.

**NOVEMBER 20.**

**Yeovil.**—Road Materials.—For T.C. A. J. Price, B.S.

**NOVEMBER 21.**

**Berkshire.**—Road Material.—For C.C. Lt.-Col. J. F. Hawkins, C.S., Reading.

**Gloucestershire.** — Roadstone. — For C.C. C.S., Gloucester.

**NOVEMBER 25.**

**Belfast.**—Iron Castings.—For Harbour Commissioners. M. J. Watkins, general manager.

**Buxton.**—Highway Materials.—For T.C. F. Langley, B.E.

**Somerset.**—Road Materials.—For C.C. C.S., Ashcombe House Annexe, Milton-rd., Weston-super-Mare.

## ENGINEERING, IRON AND STEEL.

**NOVEMBER 13.**

**Aspatria.**—Extensions.—To sewage works, for U.D.C. Fred. J. Rodwell & Son, engineers, 20, Park-row, Leeds. Dep. £2 2s.

**Macclesfield.**—Sewerage.—In Dickens-lane, Poynton-with-Worth, for R.D.C. J. H. Walters, E., Moody-chambs., Congleton. Dep. £2 2s.

**Mouldsworth.**—Mains.—Cast-iron pipes, 24-in. dia., for contract No. 2 of Mouldsworth to Ellesmere Port scheme for West Cheshire Water Board. G. H. Hill & Sons, civil engineers, 40, Kennedy-st., Manchester. Dep. £2 2s.

**South Africa.**—Tanks.—Three 10,000-gallon pressed-steel tanks, for South African Railways and Harbours Administration. Dept. of Overseas Trade S.W.1. (G.Y. 13,057.)

**NOVEMBER 14.**

**East Grinstead.** — Sewage. — Construction of Forest-row sewage works, for R.D.C. S. C. Eagles, consulting engineer, Athenæum-chambs., 71, Temple-row, Birmingham. Dep. £3 3s.

**Newtownbreda.** — Sewerage. — For Newtownbreda area, for Hillsborough R.D.C. R. Ferguson & S. M'Tiveen, consulting engineers, 36, Scottish Provident-bldgs., Belfast.

**NOVEMBER 15.**

**Lower Annandale.**—Concrete Tank.—At Kennedy's-corner, also near Parkhead Farm, for Dumfries C.C. Warren & Partners, 94, Hope-st., Glasgow. Dep. £2 2s.

**NOVEMBER 16.**

**Walsall.**—Sewerage.—At Pelsall, for R.D.C. H. Onions, E. and S. Dep. £2 2s.

**NOVEMBER 17.**

**Kettering.**—Water Supply.—Also sewerage and sewage disposal, at Corby, for R.D.C. Pick, Everard, Keay & Gimson, engineers, 6, Millstone-lane, Leicester. Dep. £2 2s.

**NOVEMBER 18.**

**Chapel-en-le-Frith.** — Enlargement.—Providing, laying and jointing of about 169 lin. yds. of 3-in. cast-iron main at Dove Holes, and enlargement of engine-house, etc., at Greensides, Hartington, Upper Quarter, for R.D.C. Brady & Partington, engineers, Market-st. Dep. £1 each.

**Stockport.**—Footbridge.—Over head of Fernilee reservoir, for T.C. G. H. Hill & Sons (Manchester), 40, Kennedy-st., Manchester. Dep. £1 1s.

**NOVEMBER 20.**

**Middlesex.**—Sewerage.—For West Middlesex main sewerage (Contract, S.21) Brent Valley main sewer—Lower Section, for C.C. Dodd & Watson, engineers, 3, Central-buildings, Westminster, S.W.1. Dep. £5 5s.

**NOVEMBER 21.**

**London.** — Building. — 12 reinforced concrete primary filters, pump house and wash water tank, together with laying of mains and ancillary work, at Stoke Newington Works, Green-lanes, Finsbury Park, for M.W.B. Chief E., 173, Rosebery-av., E.C.1. Dep. £10.

**Skegness.**—Reservoir.—At Mill Hill, Welton-le-Marsh, for U.D.C. R. H. Jenkins, Waterworks Engineer and Manager. Dep. £2 2s.

**NOVEMBER 22.**

**Dublin.**—Steelwork.—80 tons of steelwork for renewal of 4 bridges, for Gt. Southern Rlys. A. W. Bretland, Chief Engineer, Westland-row Station, Dublin, C.17.

**Yeovil.**—Water Supply.—At Stoke-under-Ham, for R.D.C. C. A. Wilson, S., 28, Kingston.

**NOVEMBER 24.**

**Derby.**—Widening.—And strengthening bridge over L.M. & S. Rly., Osmaston Park-rd., for C.B. E. H. Bennett, B.E. and S. Dep. £2 2s.

**NOVEMBER 27.**

**Cudworth.**—Water Tower.—For U.D.C. O. F. Stanley, Gas and Water Engineer, Barnsley-rd. Dep. £2 2s.

**NOVEMBER 28.**

**London.**—Extensions.—To power station, for Fulham B.C. Preece, Cardew & Rider, engineers, 8 and 10, Queen Anne's-gate, Westminster, S.W.1. Dep. £12 10s.

**NOVEMBER 29.**

**Brentwood.**—Additions.—To sewage disposal works, Nags Head-lane, for Brentwood and Billericay Joint Committee. Willcox & Raikes, engineers, 33, Gt. Charles-st., Birmingham. Dep. £10 10s.

**NOVEMBER 30.**

**Ellon.**—Bridge.—Over River Ythan, for Logie Buchan Bridge Committee of Aberdeenshire C.C. J. Roy, Tipperty, Ellon. Dep. 5s.

**Margate.**—Main.—Approximately 6 miles of 20-in. cast-iron water main from Plucks Gutter in Stourmouth to Fleete; also steelwork pipe bridge and 20-in. steel pipe over River Stour at Plucks Gutter, for T.C. B.E. and S., 40, Grosvenor-pl. Dep. £5 5s.

## ROAD, SEWERAGE AND WATER WORKS.

**NOVEMBER 13.**

**London.**—Making-up.—Passageway rear of 283-313, King-st., for Hammersmith B.C. R. H. Clucas, B.E. and S.

**Maldens and Coombe.**—Reconstruction.—Of two sections of Kingston and Burlington roads, for U.D.C. E. and S. Dep. £2 2s.

**Southborough.** — Extension.—Of cemetery, for U.D.C. S.

**Stockton.**—Making-up.—Of Richardson-rd. and Oxbridge-lane south back, for T.C. B.E. Dep. £1 1s.

**Warrington.**—Making-up.—Various streets, for T.C. B.S.

**NOVEMBER 14.**

**Manchester.**—Sewer.—In Altrincham-rd., Baguley, between Hall-lane and Baguley-brook, for T.C. City E. Dep. £2 2s.

**Prescot.**—Making-up.—Of Lacy-rd., for U.D.C. S.

**NOVEMBER 15.**

**Barrhead.**—Sewer.—1,140 yds., for T.C. C. E. Wardlaw, E., 112, Bath-st., Glasgow, C.2. Dep. £1.

**Chelmsford.**—Making-up.—Of Upper Mildmay-rd., Bouverie-rd., St. John's-rd., for T.C. V. J. Willis, B.E. and S. Dep. £2 2s.

**Havant and Waterloo.**—Making-up.—Of Lester-av., for U.D.C. W. L. Hibberd, E. Dep. £2 2s.

**London.**—Paving.—Of Amyruth-rd., Brockley, for Lewisham B.C. John W. Shuter, T.C.

**Manchester.**—Drainage, etc.—To various roads at Withington, for T.C. Highways Dept. (District Surveyors' Office), Town Hall, 2. Dep. £1 1s.

**Newton Abbot.**—Pipe.—Excavating for and laying 134 yds. of 1¼ in. copper water service pipe at Lower Gabwell, Stoke-in-Teignhead, and 267 yds. of 1¼ in. copper water service pipe at Netherton, in the parish of Haccombe-with-Coombe, for R.D.C. S., Westminster Bank-cham., Courtenay-st.

**Oxford.**—Redrainage.—At County and City Mental Hospital, for C.C. Howard Humphreys & Sons, 17, Victoria-st., S.W.1. Dep. £2 2s.

**Rochdale.**—Asphalting.—43,000 sq. yds. of two-coat asphalt in new Arterial-rd. (Kingsway and Albert Royds-st.), between Oldham-rd. and Halifax-rd., for C.B. B.S.

**Rochdale.**—Asphalting.—In new arterial road between Oldham-rd. and Halifax-rd., for C.B. B.S.

**Whitley and Monkseaton.**—Making-up.—Various roads on Whitley Lodge estate, Monkseaton Links estate, and South Grange estate, for U.D.C. A. J. Rousell, S. Dep. £5 5s.

**NOVEMBER 16.**

**Cardiff.**—Tarpaving.—Grounds of Rhydypennau Council school, Llanishen, for E.C. City E.

**Coulsdon and Purley.**—Making-up.—Of New Barn-lane (part of), Kenley, for U.D.C. S. Dep. £1 1s.

**Coulsdon and Purley.**—Sewer.—500 yds. of 9-in. stoneware pipe deep sewers, together with manholes and other incidental works, for U.D.C. S. Dep. £1 1s.

**Guildford.**—Sewer.—Glazed stoneware pipe surface-water sewer in Epsom and Park-rds., Merrow, for T.C. J. W. Hipwood, B.S. Dep. £2 2s.

**Newcastle-upon-Tyne.** — Footpaths.—Roads, footpaths and sewers, on Cambrian housing estate, for T.C. Housing Architect, 18, Cloth-market. Dep. £2 2s.

**Wealdstone.**—Reconstruction.—In Wood Grange-av., Kenton, for U.D.C. P. G. May, S. Dep. £1.

**Wembley.**—Road.—Raglan-gdns. extension, for U.D.C. C. R. W. Chapman, E. and S. Dep. £2 2s.

**Wembley.** — Making-up. — Of Woodhill-cres. (part 1), for U.D.C. C. R. W. Chapman, E. and S. Dep. £1 1s.

**NOVEMBER 17.**

**Bumpstead.**—Water Supply.—At Steeple Bumpstead, for R.D.C. H. B. Thake, S., 10, High-st., Haverhill. Dep. £3 3s.

**Guildford.**—Sewers.—Worplesdon-rd. to Grange-rd., for T.C. J. W. Hipwood, B.S. Dep. £2 2s.

**Halifax.**—Making-up.—Charlesworth-ter. and adjoining street, for T.C. D. T. Lloyd Jones, B.E., Crossley-st. Dep. £1 1s.

**NOVEMBER 18.**

**Edmonton.** — Making-up. — Of Hester-rd. and Sandal-rd. (pt.), for U.D.C. E. J. Willis, E. and S. Dep. £2 2s.

**Hailsham.**—Sewer.—In North-st. and Hugletts-lane, Heathfield, for R.D.C. W. O. Humphery, E.

**Radlett.**—Making-up.—Two sections of Aldenham-av., for Herts C.C. A. E. Prescott, C.S., Hatfield.

**Southampton.**—Road.—Concrete carriageway in Victoria-rd., Farnborough, for C.C. A. C. Hughes, C.S., Winchester. Dep. £1 1s.

**NOVEMBER 20.**

**Alton.**—Park.—Reinforced concrete car park, for U.D.C. S. Dep. £1 1s.

**Bebington.**—Making-up.—Kirket-lane, for U.D.C. E. and S. Dep. £2 2s.

**Beckenham.**—Surfacing.—Of several roads with about 25,500 super. yds. of bituminous material, for U.D.C. H. Storr Best, S. Dep. £2.

**NOVEMBER 21.**

**Dublin.**—Sewer.—Outfall sewer, etc., at Malahide, for Dublin Board of Public Health. F. P. Russell, engineer to Board, 15, Parnell-sq., Dublin. Dep. £5 5s.

**NOVEMBER 22.**

**Barrow-in-Furness.** — Making-up.—Of West-av., extending from Park-drive to north-east side of entrance to Grammar School, for T.C. B.E.

**Birmingham.**—Sewers.—At Chad Brook Valley sewerage and Edington sewerage, for T.C. H. H. Humphries, City E. and S. Dep. £2 each.

**Folkestone.**—Resurfacing.—In asphalt of portion of Canterbury-rd., for T.C. E. L. Allman, B.E.

**NOVEMBER 23.**

**Luton.**—Making-up.—Various roads, for T.C. J. W. Tomlinson, B.E. and S., 12, Upper George-st. Dep. £5 5s.

**Southend-on-Sea.**—Sewering.—Arnold-av. (section 2) and making-up Cockethurst-av., for T.C. B.C. and S. Dep. £1.

**Southend-on-Sea.**—Making-up.—Arnold-av. (section 2) and Cockethurst-av., for C.B. R. H. Dyer, B.E. and S. Dep. £1.

**South Mimms.**—Making-up.—Of Cotton-rd. (part) and Oakmere-close at Potters Bar, for R.D.C. E. Carr, S.

**NOVEMBER 24.**

**Armagh.**—Road Works.—For C.C. T. E. Reid, secretary, 1, Charlemont-place.

**Bexhill.**—Sewers.—For contract No. 3, for T.C. John Taylor & Sons, engineers, Caxton House, Westminster, S.W.1. Dep. £5.

**Ealing.**—Making-up.—Of Chilton-av., for T.C. W. R. Hicks, B.E.

**NOVEMBER 25.**

**Harrogate.**—Making-up.—Of Stray-walk, for Corporation. C. E. Rivers, B.E.

**Perth and Kinross.**—Reconstruction.—Of Glasgow-Callender-rd. section Cockhill-rd., for C.C.s. W. L. Gibsan, E. and S., Road Surveyor's Office, Dunblane. Dep. £3 3s.

**NOVEMBER 28.**

**Southall-Norwood.** — Making-up.—Four private streets, for U.D.C. J. B. Thomson, E. and S. Dep. £2 2s.

## Public Appointments.

**NOVEMBER 13.**

***Hampstead, N.W.3.**—House Drainage Inspector.—For Corporation. J. E. Swindlehurst, M.A., A.M.I.C.E. Town Hall.

**NOVEMBER 15.**

**Wandsworth, East.** — District Surveyor. — For L.C.C. Clerk, County Hall, S.E.1.

**Wandsworth, North.** — District Surveyor. — For L.C.C. Clerk, County Hall, S.E.1.

**Deptford** —District Surveyor.—For L.C.C. Clerk, County Hall, S.E.1.

**NOVEMBER 17.**

***Dagenham.**—Assistant Building Inspector (temporary), for U.D.C. Clerk to the Council, Becontree-av.

**Lambeth, S.W.2.**—Street Inspector.—For Metropolitan Borough. Town Clerk, Brixton-hill.

**NOVEMBER 23.**

***West Suffolk.**—County Architect, for C.C. Clerk, Shire Hall, Bury St. Edmunds.

**NOVEMBER 27.**

***Norwich.**—Architectural Assistant, for Corporation. City Engineer, Guildhall.

# CURRENT & PROPOSED BUILDING WORK*

Abbreviations: **T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.**

**Abergele (North Wales).**—Plans passed for Roman Catholic church. Architect, Dr. G. Rhinvolucri, Bryn, Conway.

**Atherton.**—T. Croft & Sons, builders, Kay-st., propose 20 houses, Kay-st.

**Aylesbury.**—T.C. approved:—24 houses, Waltondene, Fleet & Roberts.

**Bakewell.**—J. Fengl, builder, Manor House, Winster, near Bakewell, proposes 29 houses, Wensley-lane, Winster.

**Batley.**—T.C. to consider development of land and erection of houses in Mortimer-st., Healey.—Council approved plan and confirmed the Housing Committee's decision to seek borrowing powers for £2,700 to purchase ten acres of land opposite Purwell school for rehousing purposes—Plans passed: 71 cottages and new streets on land off Brookroyd-lane, W. P. Armitage. Walter Hanstock & Son, architects, Branch-rd.

**Bebington.**—Council agreed to consider suitable sites and plans for municipal building.

**Belfast.**—E.C. to renovate Blythe-st. P.E.S. at £5,520, and approved plans for school at North Howard-st. at £25,680.

**Billingham-on-Tees.**—Council considering public baths, near Bedale-av. J. J. Hill, S.

**Bilston.**—U.D.C. propose 548 houses.

**Birkenhead.**—West Cheshire Brewery propose rebuilding Bee Hive Hotel, Church-rd., Higher Tranmere. Architect, B. Waterhouse, F.M.S.A., Threlfall's Brewery Co., Ltd., Coo.-st., Salford. Cost, £8,000.

**Blackpool.** — Associated Textile Industries (Macclesfield), Ltd., Industrial-bldgs., Macclesfield, propose factory, Plymouth-rd., Bispham. Plans by Halstead Best, F.R.I.B.A., Leeds-bldgs., Clifton-st. Cost, £100,000.

**Blyth.**—Newcastle Diocesan Board, Pearl-bldgs., Northumberland-st., Newcastle-on-Tyne, negotiating for site in Fifteenth-av. for church.

**Bridlington.**—E.C. to erect school to accommodate 400 boys on Priory Field estate.—Oxford-st. schools for girls also to be enlarged to accommodate 400 additional girls

**Bristol.**—Public Works Committee recommend sewer scheme in Brislington district to cost £35,000.

**Bromley.**—T.C. approved: Bailey & Wadhwa, 4 shops and 10 flats, Elmfield-rd. and Holwood-rd.

**Carlisle.**—John Laing & Son, Ltd., building contractors, Bolton-rd., propose 150 houses on Currock House estate.

**Castleford.**—Inquiry held into U.D.C. application for £7,500 for covered fish and meat market.

**Catterick Camp.**—Permanent offices for 5th Division Headquarters staff. Architect's Dept. War Office, London, S.W.1, prepared plans.

**Cheltenham.**—T.C. approved:—Wheeler & Mansell, 28 semi-detached and detached houses, Hatherley-rd.; Corporation, 29 houses, Alstone Lawn estate.

**Cheriton.**—U.D.C. approved: 22 houses, Oaks-rd., for Mr. Smee.

**Chesterfield.**—R.D.C. propose 20 houses, John-st. site. Architects, Houfton & Kington, Furnival-chams., Market-place.—Miners' Welfare Committee propose pithead baths, Bolsover Colliery. Plans by J. H. Forshaw, A.R.I.B.A., Architects, Mines Dept., Dean Stanley-st., Westminster, S.W.1.

**Chester-le-Street.**—Council to build 75 houses at Burnmoor. Site obtained.

**Colney Hatch.**—L.C.C. recommend £275 for repairs to male admission villa at mental hospital.

**Conisborough.**—Don Valley Conservative and Unionist Association propose club premises.

**Corby.**—Browning Bros., builders, propose 34 houses, southern extension of South-rd.—Shanks & McEwan, builders, 90 houses north side of L.M. & S. Rly.

**Coventry.**—T.C. approved:—11 houses and 1 house with shop, Lavender-av., and 8 houses, Evenlode-crescent, Freestone & Blockley; 37 houses, Pembrook-rd., Philpot Bros.; factory, Parkside, A. Davies & Sons, Ltd.; 94 houses, Middlecotes, and 2 houses with shops, corner of Middlecotes and Standard-av., E. K. Yonell & Son, Ltd.; 85 houses, Dane-rd., and 2 houses and 2 private garages, corner of Walsgrave-rd. and Dane-rd., A. E. White.

**Dawley.**—U.D.C.'s architect prepared plans for another 26 houses.

**Derbyshire.**—C.C. propose schools in Swadlincote and Newhall. G. H. Widdows, F.R.I.B.A., County Architect, St. Mary's-gate, Derby.

**Dukinfield.**—T. Mason & J. Wrigley, builders, Kelvin-st., Ashton-under-Lyne, propose laying-out land, Victoria-rd., for 25 houses.

**Durham.**—On instructions of County Works Committee, W. J. Merrett, 43, Old Elvet, Durham, forwarded to M.T. scheme for reconstruction of Sherburn Hill-Sherburn Village-rd. to cost £31,548.—W. J. Merrett, C.S., prepared scheme for tunnelling under Durham-Gateshead rd. at Teams Level crossing for Pelaw Main Collieries, Ltd.'s, railway. Cost £18,277.

**Flintshire.**—B. of E. approved purchase of site for central school between Saltney and Saltney Ferry. Plans by County Architect, Council Offices, Mold.

**Halifax.**—L. J. Ackroyd, Ltd., to erect 100 houses, Gibraltar-rd.

**Hednesford.**—F. D. Marston, architect, 11, New-st., Willenhall, prepared plans for 50 houses on Belt-rd., for A. J. Pace, builder, 536, Pye Green-rd.

**Hetton.**—C. E. Butterworth, Sanitary Inspector to R.D.C., prepared privy conversion scheme to cost about £20,000.

**Hornsey.**—T.C. to apply to M.H. for sanction to borrow £120,000 for new town hall.

**Houghton-le-Spring.**—R.D.C. to apply for sanction to build 55 houses at Newbottle.

**Kendal.**—T.C. approved:—Premises, 20, Stricklandgate, Marks & Spencer, Ltd. Architects, N. Jones & Rigby, Southport.

**Lancaster.**—Application being made by R.D.C. to Ministry for sanction to 175 houses. S.

**Leeds.**—Saxone & Sorosis Boot Co., Ltd., to reconstruct their premises at junction of Briggate and Boar-lane. Tenders to be invited.

**Leicester.**—Management of Ashby Cottage Hospital propose extensions to cost £2,300. Architect, W. Keay, F.R.I.B.A., Millstone-lane.

**Leigh.**—Corporation propose to demolish firemen's cottages, Bower-st., and erect on site block of flats. T. A. Clare, B.S.

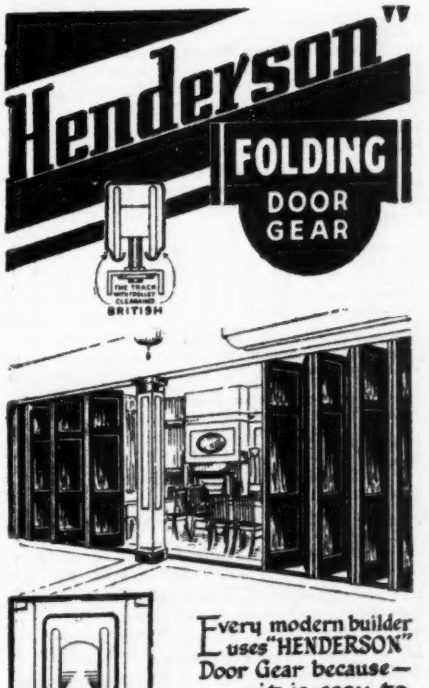
**Lincolnshire.**—E.C. to have plans prepared for Council school on Immingham Dock.

**Liverpool.**—E.C. propose to purchase land at Booker-av., Mossley Hill, for elementary school.

**London.**—G.W.R. propose reconstruction of under-mentioned bridges: Bridge carrying Didcot to Chester line over a canal near Bletchington; bridge carrying Treherbert Junction to Swansea line over new cut near Court Sart; bridge carrying Vale of Neath line over road and L.M. & S. line near Swansea, East Dock; bridge carrying public road over Oxford, Worcester and Wolverhampton line, near Brettell-lane.

**London.**—M.W.B. recommend £1,100 for repairs to the Barrow-hill reservoir, Western district.

**London (Bermondsey).**—L.C.C. sanctioned borrowing by B.C. of £4,222 for Tanner-st. and Davis-bldgs. housing scheme.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PRIVATE BRANCH EXCHANGE


**London (Hampstead).**—L.C.C. approved:—E. H. Banks, on behalf of Simon Wimborne, house and garage adjoining 33, Akenside-rd., Hampstead.

**London (Lewisham).** — B.C. approved:—Dr. Greenop, houses, Perry Hill, Catford; G. T. Harman, one-story shops, 40, Sydenham-rd., Sydenham.

**London (Poplar).**—L.C.C. sanctioned £10,365 for Old Ford-rd. housing scheme for B.C.

**London (Southwark).**—L.C.C. recommend £1,000 for rebuilding on special foundations of superintendent's lodge at Southwark-pk.

**Longbenton.**—U.D.C. to start negotiations for land at Benton-sq. and at Burradon for 120 houses. Plans by S.

**Macclesfield.**—E.C. to acquire site at Hallefields at rear of grammar school for junior school to replace St. Paul's School.—E.C. propose senior school in Buxton-rd.

**Manchester.**—Plans approved by T.C.: Public Health Committee, mortuary and post-mortem block to hospital, Neil-lane, Withington; F. W. Woolfenden, 204, Hamilton-rd., Longsight, 94 houses, Chapman-st., Goring-av., Shercliffe-av., Elsdon-drive and Pennington-st., Gorton; H. S. Fairhurst & Son, 55, Brown-st., preparing plans for 72 residential flats, Pink Bank-lane, Gorton, for Sutton's Dwellings Trust.

**Manchester.**—Plans for temporary church and Sunday school buildings at Wythenshawe been before Manchester Diocesan Conference. Buildings will cost about £8,000.

**Newcastle-on-Tyne.**—W. E. Hall & Sons, 32, Mosley-st., to start work shortly on development of estate adjoining Bridle-path, Gosforth, for 300 houses.—Faith, Ltd., to make their own arrangements for workshops and offices in Leighton-st. Plans by C. S. Errington, 21, Grainger-st. West.

**Northallerton.**—U.D.C. to demolish 16 houses and to erect 16.

**Northumberland.**—County E.C. approved various works for school building schemes by W. W. Tasker, County Architect, 17, Claremont-rd., Newcastle:—Amble £235; Ashington Bothal Council school £200; Bedlington Choppington Guide Post schools £1,660; Newburn, Throckley Council school £1,000; Otterburn Council school £750; Ponteland Council school £1,660; Prudhoe Eltringham Council school £500; Ulgham Stobswood Council school £565; Whitley North Council school £1,500. No contracts have yet been placed.—C.C. received grants of £13,900 from M.T. for completion of Seghill-rd. diversion scheme, to cost over £18,000; grant of £25,700 for Benton Park-rd. improvement scheme at Haddricks Mill bridge, to cost £34,000; and £12,000 towards improvement of Corbridge-Hexham-rd. A. Cheyne, C.S., Moothall, Newcastle-on-Tyne.

**Orpington.**—Parish Council recommended Bromley R.D.C. to pass following plans: 20 pairs of bungalows, Somerden-rd., Derrick Construction; 19 houses, Cranleigh-close, Hampton and Aspien.

**Pontardawe.**—Tenders to be obtained for repairing Gwyhyd Hospital. Architect, E. D. Jones.

**Preston.**—R. H. Fletcher, Ltd., building contractors, Fleetwood-rd., Cleveleys, propose 53 additional houses on Victoria Park estate, Blackpool-rd.

**Rochdale.**—Rev. D. Boucher & Parochial Council of St. George's Church propose church.—Butterworth & Duncan, architects, 2, Baillie-st., preparing plans for recreation hall and pavilion for nurses at Birch Hill Hospital.

**Rotherham.**—Miners' Welfare Central Fund Committee proposing pithead baths at Silverwood Colliery. Plans by J. H. Forshaw, architect, Dean Stanley-st., Westminster, S.W.1.

**Rugby.**—Governors of Lawrence Sheriff school proposing buildings. Cost £8,000. Architect, J. E. T. Loveday, Lawrence Sheriff-st.

**Scarborough.**—Gryphon Leather Co. propose factory, Seamer-rd. Architects, Wilkinson & Smith, 6, Queen-st. No contracts let.—Sanction received by T.C. to £6,667 and £700 for improvements and extensions to South Bay bathing-pool.

**Skipton.**—West Yorkshire Road Car Co., Ltd., Myrtle-rd., Harrogate, propose bus station. Architect, A. P. Harrison, High-close, Keighley.

**Southampton.**—T.C. approved:—18 houses, Shanklin-rd., Golding & Ansell, Ltd.; 15 flats, Brookvale-rd., R. S. Collins; bank premises, Bitterne-rd., Barclays Bank, Ltd.; 18 houses, Mons-crescent, H. Kendall; church and hall, Manor-rd., Trustees; 19 houses, Shanklin-rd., Golding & Ansell, Ltd.

**Stockton-on-Tees.**—T.C. to proceed with covering cattle market. Application being made to M.H. for £4,434. Plans by J. P. Wakeford, B.E.—On recommendation of Market and Properties Committee, T.C. instructed J. P. Wakeford, B.E., to proceed with plans and estimates for swimming pool adjoining present swimming pool.—F. Willey, 34, Old Elvet, Durham, preparing sketch plans for secondary school to cost £30,000 and to accommodate 1,000 pupils.

**Stoke-on-Trent.**—T.C. recommend application be made to M.H. for sanction to borrowing £37,800 for 120 houses on Shelton New-rd., Stoke, site.—City S. to be instructed to obtain tenders for 88 houses on Carmountside site.—Sanction received:—£1,310, 4 houses, Hartshill, and £1,798, extension of Meir Council school.

**Uxbridge.**—U.D.C. received M.H. approval to lay-out plan for 150 houses on Avenue housing estate, Hillingdon.

**Wellington.**—New company, called Prior Park Co., to carry out building development scheme on Priory estate.

**Whitby.**—Tenders shortly be obtained for Council school to hold 280 senior mixed children. County Architect, Northallerton.

**Wimborne and Cranborne.**—R.D.C. propose 32 houses. Sanction to £10,660 received.

**Wolverhampton.**—T.C. approved:—A. M. Griffiths, further 44 pairs of houses, New Penn estate.

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* See also **List of Contracts, Competitions, etc.**

** **In these lists every care is taken to ensure that information given is accurate and up to date, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced.**

# PRICES CURRENT OF MATERIALS.*

**Owing to the exceptional circumstances which prevail at the present time prices of materials should be confirmed by enquiry**

**[PRINCIPAL CHANGES OF THE WEEK.—Turps drops in price by 3d. per gallon.]**

## BRICKS, &c.

| | £ s. d. |
|---|---|
| Per 1,000 Alongside, in River Thames up to London Bridge. | |
| Best Stocks | 4 3 6 |
| Second Hard Stocks | 3 18 6 |

Per 1,000. Delivered at London Goods Stations.

| | £ s. d. | | £ s. d. |
|---|---|---|---|
| "Phorpres" | 2 11 3 | Flettons, B'll'n'se | 3 6 3 |
| Flettons at King's Cross | 2 11 3 | Best Blue Pressed Staffs | 9 5 0 |
| Do., grooved for Plaster | 2 13 3 | Do. Bullnose | 9 15 0 |
| | | Blue Wire Cuts | 7 5 0 |

White Midhurst Facing Bricks (delivered London site) 5 0 0

"Phorpres" Whites (do.) 3 17 3

"Phorpres" Rustic Facing Bricks, delivered Central London per 1,000 3 12 3

Best Stourbridge Fire Brick:—

| | | | |
|---|---|---|---|
| 2½ in. | 8 11 0 | 3 in. | 10 3 0 |

GLAZED BRICKS—

| | | | |
|---|---|---|---|
| Best White Ivory and Salt Glazed Stretcher | 21 0 0 | D'ble Str'tch'rs | 29 10 0 |
| | | D'ble Headers | 26 10 0 |
| Headers | 20 10 0 | One side and two Ends | 30 10 0 |
| Quoins, Bullnose and 4½ in. Flats | 27 10 0 | Two sides and one End | 31 10 0 |
| | | Splays and Squints | 28 0 0 |

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

## PARTITION SLABS.

Delivered London Area.

CLINKER CONCRETE.

| | | | |
|---|---|---|---|
| 2" per yd. sup. | 1 6 | 3" per yd. sup. | 2 0 |
| 2½ " " | 1 8 | 4" " | 2 4 |

CRANHAM TERRA COTTA.

| | | | |
|---|---|---|---|
| 2" per yd. sup. | 3 0 | 3" per yd. sup. | 3 8 |
| 2½ " " | 3 6 | 4" " | 4 7 |

HEMPSTEAD—KEYED TWO SIDES.

| | | | |
|---|---|---|---|
| 2" per yd. sup. | 3 3 | 3" per yd. sup. | 3 9 |
| 2½ " " | 3 6 | 4" " | 4 3 |

| | s. d. | |
|---|---|---|
| Thames Ballast | 6 6 per yd. | delivered 2 miles radius Paddington. |
| Pit Ballast | 5 6 " " | |
| Pit Sand | 7 0 " " | |
| Washed Sand | 7 6 " " | |
| ¾ in. Shingle | 6 6 " " | |
| ¾ in. Broken Brick | 10 6 " " | |
| Pan Breeze | 7 6 " " | |

## CEMENT.

Per ton delivered in London area in full van loads.

| | |
|---|---|
| Best Portland Cement. British Standard Specification. Test | |
| In Jute Sacks (11 to ton) | £2 4 9 |
| In Paper Bags (20 to ton) | 2 6 0 |

Colorcrete No. 1 & 2 Coloured Rapid Hardening Portland Cement in 1 cwt. paper bags free (non-returnable) 20/- per ton above Portland Cement Price. "Snowcrete" White Portland Cement in 1 cwt. paper bags free (non-returnable) 175/- per ton.

Alongside Vauxhall in 80 Ton Lots.

| | |
|---|---|
| Jute Sacks (11 to ton) | 1 17 9 |
| Paper bags (20 to ton) | 1 19 0 |
| Ferrocrete per ton extra on above | 0 7 6 |
| Vitrocrete per ton extra on above | 0 7 6 |

NOTE.—Jute Sacks are charged 1s. 6d. each and credited 1s. 6d. each nett if returned in good condition within three months, carriage paid.

| | |
|---|---|
| Super Cement (Waterproof) Paper Bags free | 3 16 0 |
| Roman Cement | 6 15 0 |
| Parian Cement | 5 15 0 |
| Keene's Cement, White | 5 15 0 |
| " Pink | 5 10 0 |

## PLASTER.

| | |
|---|---|
| Plaster, Coarse, Pink | 3 0 0 |
| " " White | 4 12 6 |
| " Fine | 4 12 0 |
| Sirapite, Coarse | 3 9 0 |
| " Finish | 3 17 0 |
| Grey Stone Lime | 2 5 0 |
| Chalk Lime | 2 5 0 |
| Best Ground Blue Lias Lime | 1 17 6 |
| Hair per cwt. | 2 2 6 |
| Granite Chippings | 1 12 0 |

NOTE.—Sacks are charged 1s. 6d. each and credited 1s. 6d., if returned in good condition within three months carr. pd.

Stourbridge Fireclay in sacks 37s. 0d. per ton at rly. dep.

## STONE.

| | s. d. |
|---|---|
| BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R, per ft. cube | 2 10 |
| BEER STONE—RANDOM BLOCK— | |
| Free on rail at Seaton Station, per ft. cube | 2 3 |
| Delivered free on rail Nine Elms, S.R. per ft. cube | 3 1½ |
| Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra. | |
| PORTLAND STONE— | |
| Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube | 4 6½ |
| Do. do. delivered on road waggons at above stations, per ft. cube | 4 5½ |
| White basebed, 3d. per ft. cube extra. | |
| NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft. | |
| HOPTON-WOOD STONE— | s. d. |
| F.O.R. Quarries Wirksworth, Derbyshire, Random blocks from 10 ft. and over P.ft.cb. | 14 0 |
| Sawn two sides | 22 6 |
| Sawn, three or four sides | 27 6 |
| CHILMARK—RANDOM BLOCK— | |
| At Nine Elms, per ft. cube | 3 11 |
| YORK STONE, BLUE—*Robin Hood Quality.* | |
| Delivered at any Goods Station London. | |
| 6 in. sawn two sides landings to sizes (under 30 ft. super) Per ft. super | 5 6 |
| 6 in. rubbed two sides, ditto " | 6 0 |
| 3 in. sawn two sides slabs (random sizes) " | 2 3½ |
| 2 in. to 2½ in. sawn one side slabs (random sizes) " | 1 6½ |
| 1½ in. to 2 in. ditto " | 1 3½ |
| HARD YORK— | |
| Delivered at any Goods Station, London. | |
| Scappled random blocks Per ft. cube | 6 3 |
| 6 in. sawn two sides landing to sizes (under 40 ft. super) Per ft. super | 5 1½ |
| 6 in. rubbed two sides, ditto " | 6 1½ |
| 4 in. sawn two sides slabs (random sizes) " | 3 1½ |
| 3 in. ditto ditto " | 2 8 |
| 2 in. self-faced random flags Per yd. super | 8 0 |

## CAST STONE.

Delivered in London area in full van loads, per ft. cube: Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills 10s. 0d.

## SOFT WOOD.

GOOD BUILDING DEAL.

| Inches. | Per stan. | Inches. | Per stan. |
|---|---|---|---|
| 4 × 11 | £23 10 | 3 × 6 | £17 10 |
| 4 × 9 | 22 10 | 3 × 11 | 19 10 |
| 4 × 8 | 21 0 | 2 × 11 | 19 10 |
| 4 × 7 | 19 0 | 3 × 9 | 19 10 |
| 3 × 8 | 18 0 | 2½ × 9 | 19 10 |
| 3 × 7 | 18 0 | 3 × 4½ | 17 10 |
| 2½ × 7 | 18 0 | 3 × 4 | 17 10 |

PLANED BOARDS.

| | | | |
|---|---|---|---|
| 1 × 11 | £22 10 | 1 × 9 | £21 |

PLAIN EDGE FLOORING.

| Inches. | per sq. | Inches. | per s. |
|---|---|---|---|
| ⅝ | 16/- | 1¼ | 25/- |
| ¾ | 17/- | 1½ | 27/6 |
| 1 | 20/- | | |

TONGUED AND GROOVED FLOORING.

| Inches. | per sq. |
|---|---|
| 1 | 21/- |
| 1¼ | 26/- |
| 1½ | 27/6 |

MATCHING (BEST).

| Inches. | per sq. |
|---|---|
| ⅝ | 16/- |
| ¾ | 18/6 |
| 1 | 22/6 |

| ins | BATTENS. | s. d. |
|---|---|---|
| ¼ × 2 | per 100 ft. | 2 6 |

SAWN LATHS. s. d.

Per bundle 2 3

## HARD WOOD.

1 INCH AND UP THICK.

| Average price for prime quality. | £ s. d. |
|---|---|
| Dry Austrian Wainscot, per ft. cube | 0 15 0 |
| Dry American and/or Japanese Figured Oak, per ft. cube | 0 12 0 |
| Dry American and/or Japanese plain Oak, per ft. cube | 0 10 0 |
| Dry sq. edged Honduras Mahogany, per ft. cube | 0 14 0 |
| Dry log-cut Honduras Mahogany, per ft. cube | 0 16 0 |
| Dry Cuba Mahogany, per ft. cube | 1 1 0 |
| Dry Teak, per ft. cube | 0 14 0 |
| Dry American Whitewood, per ft. cube | 0 10 0 |
| Best Scotch Glue, per cwt. | 3 0 0 |
| Liquid Glue, per cwt. | 4 7 0 to 5 10 0 |

## SLATES.

First quality slates from Bangor or Portmadoc, carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

| | £ s. d. | | £ s. d. |
|---|---|---|---|
| 24 by 12 | 29 15 0 | 18 by 10 | 15 12 6 |
| 22 by 12 | 25 0 0 | 18 by 9 | 13 15 0 |
| 22 by 11 | 22 10 0 | 16 by 10 | 13 10 0 |
| 20 by 12 | 22 0 0 | 16 by 8 | 10 7 6 |
| 20 by 10 | 19 7 6 | | |

## TILES.

Delivered at London rate stations in full truck loads (not less than 6 tons. Per 1,000 f.o.r. London.

| | |
|---|---|
| Best machine-made tiles from Broseley or Staffordshire district | £4 7 0 |
| ditto hand-made ditto | 5 0 0 |
| Ornamental ditto | 5 8 6 |
| Hip and valley tiles (per dozen) Hand-made | 0 9 6 |
| Machine-made | 0 9 0 |

## METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

| | |
|---|---|
| R.S. Joists, cut and fitted | £11 0 0 |
| Plain Compound Girders | 12 0 0 |
| " Stanchions | 15 0 0 |
| In Roof Work | 18 0 0 |

MILD STEEL ROUNDS.—To London Station, per ton.

| Diameter. | £ s. d. | Diameter. | £ s. d. |
|---|---|---|---|
| ¼ in. | 12 0 0 | ⅜ in. to ½ in. | 10 15 0 |
| ⅝ in. | 11 0 0 | ⅝ in. to 2½ in. | 10 10 0 |

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward. If sent from London Stocks.)

| | Standard Wrot. Mild Steel Tubes and Tubulars ⅛in. to 6in. | Genuine Wrot. (Puddled) Iron Tubes and Tubulars ⅛in. to 6in. | Standard Fittings Sizes ⅛in. to 6in. | Standard Flanges Sizes ⅛in. to 6in. |
|---|---|---|---|---|
| | % | % | % | % |
| Gas | 65 | 52½ | 57½ | 70 |
| Water | 61½ | 48½ | 52½ | 65 |
| Steam | 57½ | 45 | 47½ | 60 |
| Galv. gas | 52½ | 40 | 47½ | 60 |
| Galv. water | 47½ | 35 | 42½ | 55 |
| Galv. steam | 42½ | 30 | 37½ | 50 |

C.I. HALF-ROUND GUTTERS—London Price ex Works.

| Per yd. in 6 ft. lengths. | Gutters. | Angles and Nozzles. | Stop Ends. |
|---|---|---|---|
| 3 in. | 1/4 | 1/0 | 4½d. |
| 3½ in. | 1/5 | 1/1½ | 5d. |
| 4 in. | 1/5 | 1/2½ | 6d. |
| 4½ in. | 1/6 | 1/4½ | 8½d. |
| 5 in. | 1/9 | 1/6½ | 9d. |

O.G. GUTTERS.

| | | | |
|---|---|---|---|
| 3 in. | 1/6 | 1/4 | 6½d. |
| 3½ in. | 1/8 | 1/4 | 7d. |
| 4 in. | 1/9 | 1/4½ | 7½d. |
| 4½ in. | 1/10 | 1/7½ | 8½d. |
| 5 in. | 2/2 | 1/10½ | 10½d. |

RAIN WATER PIPES, &c.

| Per yd. in 6 fts. | Pipe. | Bends, stock angles, | Branches, stock angles |
|---|---|---|---|
| 2 in. | 2/0 | 1/2½ | 1/0½ |
| 2½ in. | 2/1 | 1/4½ | 2/2 |
| 3 in. | 2/7 | 1/9 | 2/7½ |
| 3½ in. | 3/0 | 2/1½ | 3/0½ |
| 4 in. | 3/5 | 2/6 | 3/8½ |

Less 20 per cent. trade discount.

Tonnage allowance—4 ton lots, 5 per cent. 2 ton lots, 2½ per cent.

L.C.C. COATED SOIL PIPES—London Prices ex Stock.

| | Pipe, | Bends, stock angles. | Branches, stock angles. |
|---|---|---|---|
| | s. d. | s. d. | s. d. |
| 2 in. per yd. in 6 fts. | 2 5 | 1 9 | 2 1½ |
| 2½ in. " | 2 9½ | 1 11 | 2 7½ |
| 3 in. " | 3 0 | 2 1½ | 3 1½ |
| 3½ in. " | 3 2½ | 2 7½ | 3 8 |
| 4 in. " | 3 8 | 2 11½ | 4 2½ |

L.C.C. COATED DRAIN PIPES—London Prices ex Stock.

| | Pipe, | Bends, stock angles. | Branches, stock angles. |
|---|---|---|---|
| | s. d. | s. d. | s. d. |
| 3 in. per yd. in 9 ft. lengths | 5 0 | 4 6 | 7 0 |
| | cwt. qr. lbs. | | |
| 4 in. " | 1 1 20 | 4 9 | 5 6 8 0 |
| 5 in. " | 1 2 22 | 5 10 | 9 6 13 6 |
| 6 in. " | 2 0 6 | 6 10 | 12 0 18 0 |

Gaskin for jointing 41/- per cwt.

| | Per ton in London. £ s. d. | | £ s. d. |
|---|---|---|---|
| IRON— | | | |
| Common bars | 10 0 0 | to | 10 10 0 |
| Staffordshire Crown Bars— | | | |
| Good merchant quality | 10 10 0 | to | 11 0 0 |
| Staffordshire Marked Bars | 14 0 0 | ... | 15 0 0 |
| Mild Steel Bars | 9 0 0 | ... | 10 0 0 |
| Steel Bars, Ferro-Concrete quality, basis price | 8 0 0 | ... | 9 0 0 |
| Hoop iron, basis price | 11 0 0 | ... | 12 0 0 |
| " Galvanised | 27 0 0 | ... | 28 0 0 |
| Soft Steel Sheets, Black— | | | |
| Ordinary sizes, to 20 g | 11 0 0 | ... | 11 10 0 |
| " " " 24 g. | 12 0 0 | ... | 13 0 0 |
| " " " 26 g. | 14 0 0 | ... | 15 0 0 |
| Sheets Flat Best Soft Steel, C.R. and C.A. quality— | | | |
| Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g. | 13 0 0 | ... | 14 0 0 |
| Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g. | 14 0 0 | ... | 15 0 0 |
| Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g. | 17 0 0 | ... | 18 0 0 |

No. 1 quality £4 per ton extra.

| | | | |
|---|---|---|---|
| Flat and Galvanised Corrugated Sheets— | | | |
| Ordinary sizes, 6 ft. to 9 ft. to 20 g. | 13 0 0 | ... | 14 0 0 |
| Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g. | 14 10 0 | ... | 15 10 0 |
| Ordinary sizes, 6 ft. to 9 ft. to 26 g. | 16 0 0 | ... | 17 0 0 |
| Sheets, Galvanised Flat, Best quality— | | | |
| Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker | 16 10 0 | ... | 17 10 0 |
| Best Soft Steel Sheets, 22 g. and 24 g. | 18 10 0 | ... | 20 0 0 |
| Best Soft Steel Sheets, 26 g. | 20 0 0 | ... | 21 10 0 |
| Cut Nails, 3 in. to 6 in. | 15 0 0 | ... | 16 0 0 |

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

## COPPER.

| | | s. d. |
|---|---|---|
| Seamless Copper tubes (basis) | per lb. | 0 9 |
| Strong sheet | " | 0 10 |
| Thin | " | 0 11 |
| Copper nails | " | 1 0 |
| Copper wire | " | 0 11 |

## PLUMBERS BRASS WORK.

Delivered in London

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

| ½ in. | ⅝ in. | 1 in. | 1¼ in. | 1½ in. | 2 in. | |
|---|---|---|---|---|---|---|
| 29/- | 45/- | 76/- | 153/- | 246/- | 510/- | per doz. |

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

| ½ in. | ⅝ in. | 1 in. | 1¼ in. | 1½ in. | 2 in. | |
|---|---|---|---|---|---|---|
| 41/6 | 62/- | 92/- | 174/- | 300/- | 588/- | per doz. |

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

**PRICES CURRENT OF MATERIALS**—*(contd)*.

RIVER PATTERN SCREW DOWN MAIN FERRULES.

¾ in. 1 in. 1 in.
39/- 60/- 116/6 per doz.

CAPS AND SCREWS.

1¼ in. 1½ in. 2 in. 3 in. 3½ in. 4 in.
7/6 10/- 14/- 23/- 30/- 42/- per doz.

DOUBLE NUT BOILER SCREWS.

¾ in. 1 in. 1¼ in. 1½ in. 2 in.
7/6 11/- 17/- 29/- 36/- 63/- per doz.

BRASS SLEEVES.

1¼ in. 2 in. 3 in. 3½ in. 4 in.
10/- 12/- 20/- 24/- 31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES S.F.

¾ in. 1 in. 1¼ in. 1½ in.
35/- 56/- 98/- 162/- 228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH GRASS CLEANING SCREW.

| | 1½ in. | 1½ in. | 2 in. | 3 in. | |
|---|---|---|---|---|---|
| 8 lbs. P. traps | 33/- | 41/- | 56/- | 101/- | per doz. |
| 8 lbs. S. traps | 35/- | 45/- | 66/- | 126/- | ,, |

TIN.—English Ingots, 2/1 per lb. SOLDER—Plumber, 11d., Tinmen's, 1s., Blowpipe, 1/1 per lb.

**LEAD, &c.**

| (Delivered in London.) | £ | s. | d. |
|---|---|---|---|
| LEAD—Sheet, English, 4 lb. and up | 20 | 10 | 0 |
| Pipe in coils | 17 | 10 | 0 |
| Soil pipe | 24 | 10 | 0 |
| Compo pipe | 25 | 0 | 0 |

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 4s. per cwt. extra, and over 3 cwt. and under 5 cwt., 2s. 6d. per cwt. extra. Cut to sizes 4s cwt. extra.

Old lead, ex London area, at Mills .....per ton £10 10 0

**PAINTS, &c.**

| | £ | s. | d |
|---|---|---|---|
| Raw Linseed Oil, in pipes .....per gallon | 0 | 2 | 2 |
| ,, ,, ,, in barrels ..... ,, | 0 | 2 | 4 |
| ,, ,, ,, in drums ..... ,, | 0 | 2 | 7 |
| Boiled ,, ,, in barrels ..... ,, | 0 | 2 | 7 |
| ,, ,, ,, in drums ..... ,, | 0 | 2 | 10 |
| Turpentine, in barrels ..... ,, | 0 | 3 | 11 |
| ,, in drums (10 galls.) ,, | 0 | 4 | 1 |
| Genuine Ground English White Lead, per ton (In not less than 5-cwt. casks.) | 45 | 0 | 0 |

Extra for 1-cwt. kegs over 5-cwt. casks is 5/9 cwt.

GENUINE WHITE LEAD PAINT.

"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganswyte," "Polacco," "J" Brand, and other best brands (in 14-lb. tins) not less than 5-cwt. lots

| | £ | s. | d. |
|---|---|---|---|
| per ton delivered | 63 | 0 | 0 |
| Red Lead, Dry (packages extra) ... per ton | 32 | 0 | 0 |
| Best Linseed Oil Putty .....per cwt. | 0 | 13 | 6 |
| Size, XD quality .....fkn. | 0 | 3 | 0 |

**VARNISHES, &c.**

| | | Per gallon | | |
|---|---|---|---|---|
| Oak Varnish ..... | Outside | 0 | 14 | 0 |
| Fine ditto ..... | ditto | 0 | 16 | 0 |
| Fine Copal ..... | ditto | 0 | 18 | 0 |
| Pale Copal..... | ditto | 1 | 0 | 0 |
| Pale Opal Carriage ..... | ditto | 1 | 4 | 0 |
| Best ditto ..... | ditto | 1 | 12 | 0 |
| Floor Varnish ..... | Inside | 0 | 18 | 0 |
| Fine Pale Paper ..... | ditto | 0 | 18 | 0 |
| Fine Copal Cabinet ..... | ditto | 1 | 2 | 0 |
| Fine Copal Flatting..... | ditto | 1 | 0 | 0 |
| Hard Drying Oak ..... | ditto | 0 | 18 | 6 |
| Fine Hard Drying Oak ..... | ditto | 0 | 19 | 6 |
| Fine Copal Varnish ..... | ditto | 1 | 0 | 0 |
| Pale ditto ..... | ditto | 1 | 12 | 6 |
| Best ditto ..... | ditto | 1 | 2 | 6 |
| Best Japan Gold Size..... | | 0 | 12 | 0 |
| Best Black Japan ..... | | 0 | 10 | 0 |
| Oak and Mahogany stain (water) ..... | | 0 | 12 | 6 |
| Brunswick Black ..... | | 0 | 7 | 0 |
| Berlin Black ..... | | 0 | 14 | 0 |
| Knotting (patent) ..... | | 1 | 5 | 0 |
| French and Brush Polish ..... | | 0 | 17 | 0 |
| Liquid Dryers in Terebene ..... | | 0 | 9 | 0 |
| Cuirass Black Enamel..... | | 0 | 7 | 0 |

**GLASS.**

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

| per ft. | | Per ft. | |
|---|---|---|---|
| 15 oz. fourths | 2¾d. | 32 oz. fourths ..... | 6¼d. |
| 15 ,, thirds ... | 2⅝d. | 32 ,, thirds ..... | 8¼d. |
| 21 ,, fourths | 3¼d. | Obscured Sheet, 15 oz.... | 3d. |
| 21 ,, thirds ... | 3⅞d. | ,, ,, 21 oz.... | 4¼d. |
| 26 ,, fourths | 4¼d. | Fluted, 15 oz. 6¼d., 21 oz. | 9d. |
| 26 ,, thirds ... | 5¼d. | Em'lld, 15 oz. 4¼d., 21 oz. | 5¼d. |

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

| | Per ft |
|---|---|
| Rolled plate ¼ in. ..... | 4¼d. |
| Rough rolled ⅜ in. ..... | 5¼d. |
| Rough rolled ½ in..... | 5¼d. |
| Figured, Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish White | 5¼d. |
| Ditto, tinted ..... | 8d. |
| Rolled Sheet ..... | 4¼d. |
| White Rolled Cathedral ..... | 4¼d. |
| Tinted do. ..... | 6¼d. |

Cast plate is same price as rough rolled.

| "VITA" GLASS. | Per foot. s. | d. |
|---|---|---|
| Clear sheet—not exceeding 1 foot ..... | 1 | 0 |
| Do. do. 2 feet ..... | 1 | 3 |
| Do. over 2 feet ..... | 1 | 9 |
| Polished plate—not exceeding 1 foot ..... | 1 | 6 |
| Do. not exceeding 2 feet ... ... | 3 | 0 |
| Cathedral—not exceeding 1 foot ..... | 1 | 0 |
| Do. larger sizes ..... | 1 | 6 |
| Horticultural Sheet and Cathedral "Vita" Glass. Sizes up to 24 inches by 18 inches or not exceeding 3 feet ..... | 1 | 0 |
| 3/16 in. Wired Georgian Design. Sizes up to 108 inches long by up to 24 inches wide..... | 2 | 6 |

# NEW BUILDINGS IN SCOTLAND

ARBROATH.—EXTENSION.—Plans are in hand for reconstruction and extensions to the "North Sea Hotel." Messrs. A. and J. Soutar, architects and surveyors, 8, King William-street, London.

DUMBARTONSHIRE — EXTENSION.—The C.C. have plans in hand for reconstruction and extension scheme for Kilcreggan public school. Mr. James Weekes, County Architect, College-street, Dumbarton.

EDINBURGH.—BAKERY.—Plans are in hand for a new bakery for the Edinburgh and Dumfries-shire Dairy Co., Ltd., at West Bryson-road. Mr. M. Pardon Smith, architect and quantity surveyor, Irish-street, Dumfries.

EDINBURGH.—BUILDING.—The Dean of Guild Court has approved the following: Melrose and Thomson, eight houses at Captain's-road, Liberton, and James Miller, 76 houses at Riversdale-crescent.

GLASGOW.—RECONSTRUCTION.—Plans are in hand for demolition, reconstruction and extension scheme to the Louvre Cinema, Parkhead. Messrs. McWhannell and Reid, architects, 233, West Regent-street, Glasgow, W.C.2.

GLASGOW.—HOUSES.—The Housing Department of the Corporation has been granted permission by the Dean of Guild Court, Glasgow, to erect 42 houses at Kelvindale-road and 12 houses and a number of shops at Abercromby-street.—Several shops and stores will be built in Paisley-road West, at Forfar-avenue, by W. and G. Taylor; and Nitshill Church of Scotland are to erect a church hall in Pinmore-street, Nitshill.

GLASGOW.—CHURCH.—Plans are in hand for a new church to be erected for United Free Church of Scotland (Continuing) at Shieldhall. Messrs. Stellmacs, 57, Oswald-street, Glasgow, C.2, are the architects and surveyors.

KIRKCALDY.—HOUSES.—The Fife C.C. are inviting tenders for the erection of 32 houses at Kinglassie. Messrs. W. Williamson and Hubbard, F. and A.R.I.B.A., of Kirkcaldy, are the architects.

KIRKCALDY. — CLINIC. — A child-welfare clinic and branch library are to be erected in Loughborough-road, for the T.C. Tenders are being invited. Messrs. W. Williamson and Hubbard are the architects.

KINCARDINESHIRE.—SCHOOL.—The C.C. are to erect a new £6,000 school at Inverberrie. Mr. R. W. Walker, Education Architect and Surveyor, County Offices, 33, Evans-street, Stonehaven.

LOCHGELLY. — HOUSING. — The T.C. has decided to erect an additional 150 houses.

MILLPORT.—ADDITIONS.—Plans are in hand for reconstruction and additions to the "George Hotel." Messrs. Frank Southern and Orr, architects, 113, St. Vincent-street, Glasgow, W.C.2.

PAISLEY.—EXTENSION.—Plans are in hand for reconstruction and extensions at Causeyside for the Paisley Manufacturing Co-operative Society, Ltd. The architect is Mr. Hamilton Neil, 163, St. Vincent-street, Glasgow, W.C.2.

PAISLEY.—EXTENSION.—The Dean of Guild Court has approved of plans of an extension of the Free Library and Museum submitted by the Town Council, and of plans by the trustees of the Savings Bank for the erection of a new branch at the corner of Glasgow-road and Mill-street.

PORTSOY.—HOUSES.—The T.C. has decided to build three blocks of four houses each under the 1930 Act.

STIRLING.—SCHOOL.—Plans are in hand for a new school to cost about £17,000. Mr. Andrew Malcolm, County Architect and Surveyor, Spattall-street, Stirling.—Plans are also in hand for 120 houses to be erected at Bannockburn-road, and a £7,000 housing scheme at the Craigs district. Mr. A. Hill Gowdie, Burgh Architect and Engineer.

# TOWN PLANNING

THE following progress in town and country planning in England and Wales for the month ended September 30 is recorded by the Town Planning Department of the Ministry of Health :—

Preliminary Statement submitted (Stage P.S.).—Yorks (West Riding): Leeds T.C. (No. 5 and 5a).

Resolutions under Act of 1932 approved (Stage R.A.).—Derby: Bakewell U.D.C.; Gloucester: Bristol T.C. (No. 5); Kent: Canterbury T.C. (No. 5); Lancaster: *Manchester T.C. (Scheme "D"), Ormskirk U.D.C., *Stretford U.D.C. (Old Trafford); Stafford: Stone U.D.C.; Worcester: Evesham R.D.C.; Glamorgan: Cardiff T.C. (Woodstreet), Gower R.D.C. (No. 1).

Resolutions under Act of 1932 submitted for approval (Stage R.S.).—Lancaster: Warrington T.C. (No. 2); Somerset: Bridgwater T.C. (area situate in Bridgwater Borough, Burnham-on-Sea U.D., Bridgwater R.D., Taunton R.D. and Williton R.D.); Southampton: Southern Hampshire Joint Committee (Eastleigh U.D., No. 3); Sussex, West: †Worthing T.C. (No. 7); Worcester: ‡Bewdley T.C., ‡Kidderminster T.C. (No. 1), ‡Kidderminster R.D.C.; York (West Riding): Thurstonland and Farnley Tyas U.D.C.; Glamorgan: Cardiff R.D.C. (No. 4, Liswane and Whitchurch), Cardiff R.D.C. (No. 5, Pentyrch and Radyr).

Resolutions under Act of 1932 passed, but not yet submitted for approval (Stage O.R.).—Dorset: Poole T.C. (No. 1b).

Resolutions revoked.—Southampton: Kingsclere and Whitchurch R.D.C.; Warwick: Warwick R.D.C. (transferred from Kenilworth U.D.C.), Warwick R.D.C. (transferred from Solihull R.D.C.; York (West Riding): Otley U.D.C. (No. 2), Wharfedale R.D.C.

* Constituent members of the Manchester Joint Committee.
† Constituent members of the Worthing Joint Committee.
‡ Constituent members of the Kidderminster and District Joint Committee.

# BUILDING TRADE WAGES IN SCOTLAND*

**Following are grade rates authorised by the Scottish N.J.C. for Building Industry. The bricklayers in the Glasgow district have ½d. per hour extra. Painters, by ruling of the Scottish National Painters' and Decorators' Joint Council, have from January 1 new rates. Grade A towns, 1/6 per hour; Grade B, 1/5; Grade C, 1/4; Aberdeen has a special rate of 1/5½. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.**

| Grade Classifications ... | A | A¹ | A² | A³ | B | B¹ | B² | B³ |
|---|---|---|---|---|---|---|---|---|
| Craftsmen ... ... | 1/6 | 1/6 | 1/5½ | 1/5 | 1/4½ | 1/4 | 1/3½ | 1/3 |
| Labourers ... ... | 1/2 | 1/1½ | 1/1½ | 1/0½ | 1/0½ | 1/- | /11½ | /11½ |

| | | | | | | |
|---|---|---|---|---|---|---|
| Aberdeen | A | Dundee | A | Hawick | A² | Perth | A |
| Airdrie | A | Dunfermline | A | Helensburgh | A | Perthshire | A |
| Alexandria | A | Dunoon | A | Inverness | B | Peterhead | A |
| Arbroath | A³ | East Lothian | A | Kilmarnock | A | Renfrewshire | A |
| Ayrshire | A | Edinburgh | A | Kincardineshire | A² | Rothesay | A |
| Bathgate | A | Falkirk | A | Kinross-shire | A | Roxburghshire | A² |
| Bo'ness | A | Forfarshire | A³ | Kirkcaldy | A | St. Andrews | A |
| Broughty Ferry | A | Fort William | A | Lanarkshire | A | Selkirkshire | A |
| Clackmannanshire | A | Galashiels | A³ | Leith | A | Stirling | A |
| Coatbridge | A | Glasgow | A | Midlothian | A | Stirlingshire, West | A |
| Dumbartonshire | A | Greenock | A | Motherwell | A | West Lothian | A |
| Dumfries | A³ | Hamilton | A | Peeblesshire | A² | Wishaw | A |
| Dumfriesshire | A³ | | | | | | |

* The information given in this table is copyright. The rates of wages in various towns in England and Wales are given on page 758.

# CURRENT PRICES FOR BUILDING WORK IN LONDON*

## EXCAVATOR.

| | | s. | d. |
|---|---|---|---|
| Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep | per yard cube | 8 | 9 |
| Add if in clay | „ „ | 1 | 0 |
| Add for every additional depth of 6 ft. | „ „ | 0 | 6 |
| Planking and strutting to trenches | per foot super | 0 | 3 |
| Do. to sides of excavation, including shoring | „ „ | 1 | 0 |

## CONCRETOR.

| | | | |
|---|---|---|---|
| Portland cement concrete in foundations 1 to 6 | per yard cube | 24 | 3 |
| Add if in underpinning in short lengths | „ „ | 5 | 6 |
| Add if in floors 6 in. thick | „ „ | 2 | 3 |
| Add if in beams | „ „ | 2 | 9 |
| Add if aggregate 1 : 2 : 4 | „ „ | 9 | 0 |
| Add for hoisting not exceeding 10 ft. beyond the first 10 ft. | „ „ | 2 | 0 |

## BRICKLAYER.

| | | £ | s. | d. |
|---|---|---|---|---|
| Reduced brickwork in lime mortar and Fletton bricks | per rod | 27 | 0 | 0 |
| Add if in stocks | „ | 7 | 0 | 0 |
| Add if in Staffordshire blues | „ | 22 | 0 | 0 |
| Add if in Portland cement and sand | „ | 1 | 5 | 0 |

### FACINGS.

| | | | | |
|---|---|---|---|---|
| Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks | per ft. super | 0 | 0 | 1½ |

### POINTING

| | | | | |
|---|---|---|---|---|
| Neat flat struck or weathered joint | „ „ | 0 | 0 | 3 |

### ARCHES.

| | | | | |
|---|---|---|---|---|
| Extra only to the price of ordinary brickwork :— | | | | |
| Fair external in half brick rings | „ „ | 0 | 0 | 10 |
| Axed in stocks | „ „ | 0 | 0 | 9 |
| Rubbed and gauged jointed in putty camber or segmental | „ „ | 0 | 6 | 0 |

### SUNDRIES.

| | | | | |
|---|---|---|---|---|
| Damp course in double course of slates breaking joint and bedded in Portland cement | „ „ | 0 | 0 | 11 |
| Setting ordinary register grates and stoves | each | 1 | 0 | 0 |
| Setting kitchener, including forming flues, &c., with all necessary fire bricks | „ | 4 | 15 | 0 |

## ASPHALTER.

| | | s. | d. |
|---|---|---|---|
| Half-inch horizontal damp course | per yard super | 4 | 6 |
| Three-quarter-inch vertical damp course | „ „ | 9 | 6 |
| Three-quarter-inch on flats in two thicknesses | „ „ | 6 | 0 |
| Angle fillet | per foot run | 0 | 3 |
| Skirting and fillet 6 in. high | „ „ | 1 | 0 |

## MASON.

| | | | |
|---|---|---|---|
| York stone templates fixed | per foot cube | 12 | 9 |
| York stone sills fixed | „ „ | 22 | 0 |
| Bath stone and all labour fixed | „ „ | 10 | 6 |
| Beer stone and all labour fixed | „ „ | 15 | 0 |
| Portland stone fixed | „ „ | 17 | 6 |
| Chilmark stone fixed complete | „ „ | 16 | 6 |

## SLATER.

| | | | | |
|---|---|---|---|---|
| Welsh 16in. × 8 in. 3 in. lap. including nails | per square | 72 | 9 | |
| Do. 20 in × 10 in. Do. Do. | „ | 80 | 9 | |
| Do. 24in. × 12in. Do. Do. | „ | 90 | 0 | |

## CARPENTER AND JOINER.

| | | | | |
|---|---|---|---|---|
| Fir framed in plates | per foot cube | 4 | 0 | |
| Do. joists | „ „ | 4 | 6 | |
| Do. roofs, floors and partitions | „ „ | 5 | 0 | |
| Do. trusses | „ „ | 7 | 3 | |

| | ¾″ | 1″ | 1¼″ | 2″ |
|---|---|---|---|---|
| Deal rough close boarding per sq. | 30/- | 35/- | 43/- | 70/- |

| | | | | |
|---|---|---|---|---|
| Flat centering for concrete floor, including struts or hangers | „ | 50 | 0 | |
| Do. to beams | per ft. sup. | 0 | 9 | |
| Centre for arches | „ | 1 | 6 | |
| Gutter boards and bearers | „ | 1 | 0 | |

### FLOORING.

| | ¾″ | 1″ | 1¼″ | 1½″ |
|---|---|---|---|---|
| Deal-edges shot per sq. | — | 38/- | 45/- | 52/- |
| Do. tongued and grooved „ | — | 43/- | 50/- | 58/- |
| Do. matchings „ | 40/- | 45/- | — | — |
| Moulded skirtings, including backings and grounds per ft. sup. | 1/4 | 1/7 | 1/9 | 2/3 |

### SASHES AND FRAMES.

| | | | | |
|---|---|---|---|---|
| One-and-a-half moulded sashes or casements | per foot super | 1 | 10 | |
| Two Do. Do. Do. | „ „ | 2 | 1 | |
| Add for fitting and fixing | „ „ | 0 | 3 | |
| Deal cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights, average size | | 3 | 6 | |

### DOORS.

| | 1½″ | 1¾″ | 2″ |
|---|---|---|---|
| Two-panel square framed per ft. sup. | 2/1 | 2/3 | 2/5 |
| Four-panel Do. „ | 2/4 | 2/6 | 2/9 |
| Two-panel moulded both sides „ | 2/6 | 2/9 | 2/11 |
| Four-panel Do. Do. „ | 2/9 | 2/11 | 3/2 |

## CARPENTER AND JOINER—continued.

### FRAMES.

| | | s. | d. |
|---|---|---|---|
| Deal wrot moulded and rebated | per foot cube | 12 | 6 |

| | | 1″ | 1¼″ | 1½″ |
|---|---|---|---|---|
| Plain deal jamb linings framed | per ft. sup. | 1/7 | 1/8 | 1/11 |
| Deal shelves and bearers | „ | 1/2 | 1/4 | 1/7 |
| Add if cross-tongued | „ | 2d. | 2d. | 2d. |

### STAIRCASES.

| | 1″ | 1¼″ | 1½″ | 2″ | 2½″ |
|---|---|---|---|---|---|
| Deal treads and risers in and including rough brackets | 2/1 | 2/4 | 2/9 | — | — |
| Deal strings wrot on both sides and framed | 1/8 | 2/- | 2/2 | 2/8 | — |

| | | s. | d. |
|---|---|---|---|
| Housings for steps and risers | each | 0 | 11 |
| Deal balusters, 1 in. x 1¼ in. | per ft. run | 0 | 9 |
| Mahogany handrail, average 3 in. x 3 in. | „ „ | 6 | 0 |
| Add if ramped | „ „ | 12 | 0 |
| Add if wreathed | „ „ | 24 | 0 |

### FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

| | | | |
|---|---|---|---|
| 6 in. barrel bolts | 8½d. | Rim locks | 2/- |
| Sash fasteners | 11½d. | Mortice locks | 4/6 |
| Casement fasteners | 1/5 | Patent spring hinges and letting into floor and making good | 19/- |
| Casement stays | 1/2 | | |
| Cupboard locks | 1/5 | | |

## FOUNDER AND SMITH.

| | | s. | d. |
|---|---|---|---|
| Rolled steel joists | per cwt. | 15 | 0 |
| Plain compound girders | „ | 18 | 0 |
| Do. stanchions | „ | 20 | 9 |
| In roofwork | „ | 26 | 6 |

## RAIN-WATER GOODS.

| | | 3″ | 4″ | 5″ | 6″ |
|---|---|---|---|---|---|
| Half-round plain rebated joints | ft. run | 1/- | 1/1 | 1/3 | 1/6 |
| Ogee Do. Do. | „ | 1/2 | 1/3 | 1/9 | 2/3 |
| Rain-water pipes with ears | „ | 1/3 | 1/10 | — | — |
| Extra for shoes and bends | each | 2/9 | 3/11 | — | — |
| Do. stopped ends | „ | 1/1 | 1/4 | 1/9 | 2/6 |
| Do. nozzles for inlets | „ | 2/2 | 2/7 | 3/7 | 4/- |

## PLUMBER.

| | | s. | d. |
|---|---|---|---|
| Milled lead and laying in flashings and gutters | per cwt. | 38 | 0 |
| Do. do. flats | „ | 37 | 0 |
| Extra labour and solder in coated cesspools | each | 6 | 9 |
| Welt joint | per ft. run | 0 | 6 |
| Soldered seam | „ „ | 1 | 3 |
| Copper nailing | „ „ | 0 | 3 |

| | ½″ | ¾″ | 1″ | 1½″ | 2″ | 4″ |
|---|---|---|---|---|---|---|
| Drawn lead waste per ft. run | 1 1/3 | 1/4 | 1/6½ | 2/5 | 2/8 | — |
| Do. service „ | 1/3 | 1/9 | 2/- | 3/- | — | — |
| Do. soil „ | — | — | — | — | — | 5/9 |
| Bends in lead pipe each | — | — | — | — | 2/6 | 6/- |
| Soldered stop ends „ | 0/9 | 1/1 | 1/6 | 2/3 | 2/10 | — |
| Red lead joints „ | 0/10 | 0/11 | 1/2 | 1/9 | 2/1 | 4/3 |
| Wiped soldered joints „ | 2/3 | 2/9 | 3/0 | 3/10 | 4/10 | 6/9 |
| Lead traps and cleaning screws „ | — | — | — | 10/6 | 14/- | — |
| Bib cocks and joints „ | 6/4 | 9/7 | 14/- | — | — | — |
| Stop cocks and joints „ | 12/4 | 14/2 | 20/8 | 54/- | — | — |

## PLASTERER.

| | | s. | d. |
|---|---|---|---|
| Render, float and set in lime and hair | per yard sup. | 2 | 0 |
| Do. Do. Sirapite | „ „ | 2 | 3 |
| Do. Do. Keen's | „ „ | 3 | 0 |
| Add saw lathing | „ „ | 1 | 4 |
| Add metal lathing | „ | 2 | 4 |
| (Not including hangers or runners, etc., for suspended ceilings.) | | | |
| Portland cement screed | „ „ | 2 | 2 |
| Do. plain face | „ „ | 3 | 3 |
| Mouldings in plaster | per 1 girth | 0 | 1½ |
| One-and-a-half granolithic pavings | per yard sup. | 4 | 6 |

## GLAZIER.

| | | | |
|---|---|---|---|
| 21-oz. sheet plain | per foot sup. | 0 | 6½ |
| 26-oz. Do. | „ „ | 0 | 7½ |
| Obscured sheet | „ „ | 0 | 8 |
| ⅛-in. rolled plate | „ | 0 | 9 |
| ¼-in. rough rolled or cast plate | „ „ | 0 | 10 |
| ¼-in. wired cast plate | „ „ | 1 | 1 |

## PAINTER.

| | | | |
|---|---|---|---|
| Preparing and distempering, 2 coats | per yard sup. | 0 | 9 |
| Knotting and priming | „ „ | 0 | 7 |
| Plain painting, 1 coat | „ „ | 0 | 9 |
| Do. 2 coats | „ „ | 1 | 2 |
| Do. 3 coats | „ „ | 1 | 9 |
| Do. 4 coats | „ „ | 2 | 4 |
| Graining | „ „ | 2 | 3 |
| Varnishing twice | „ „ | 1 | 9 |
| Sizing | „ „ | 0 | 3 |
| Flatting | „ „ | 0 | 7 |
| Enamel | „ „ | 1 | 1 |
| Wax polishing | per foot sup. | 0 | 6 |
| French polishing | „ „ | 1 | 2 |
| Preparing for and hanging paper | per piece 2/- to 4/- | | |

*These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers Liability and National Health and Unemployment Act, and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

# TRADE NEWS

## Power and Garage Equipment.

Messrs. Tangyes, Ltd., Cornwall Works, Birmingham, have sent us copies of two new publications, just issued—No. 486, relating to a full range of generating and power equipment; and No. 487, fully illustrating and describing their latest designed garage equipment. A full range of these goods can be seen on Stand No. 162, at the Commercial Motor Show.

## Restoration of Buildings.

Messrs. Szerelmey, Ltd., of 273-277, Rotherhithe New-road, S.E.16, are at present engaged upon restoring and preserving the following, among other works :—St. James's Church, Islington, for Mr. W. H. Mason, F.S.I.; the Rockingham Hotel, S.E., for Messrs. Crickmay and Sons, architects; the Court House, Warwick, for the Corporation; the Pageant House, Warwick, for the Corporation; Highgate Presbyterian Church, for Mr. J. M. Lethbridge, F.R.I.B.A.; the Consolidated Goldfields Building, E.C., for the company; and Albert Court-mansions, W., and Messrs. C. A. Coutts and Co., Ltd.'s, premises, E.C.

## Portland Cement Works.

The second unit of plant at the Ketton works of the Ketton Portland Cement Company, Ltd., was opened recently by Sir Arthur Balfour, the chairman of the company. For centuries the Ketton quarries have been worked for freestone, and to-day one of the two stones being used in the repairs to the Houses of Parliament is Ketton. In 1928 the excellent limestone and clays on the estate were first utilised for cement manufacture—the plant then laid down being designed as a three-unit scheme. The capacity of the first unit—although turning out 22,254 tons of cement for the three months ending last September—being now insufficient for demands, the plant for the second unit has been installed—machines of high calibre being laid down. The capacity is now 150,000 tons per annum. Expert examination has satisfactorily shown that the qualities which give Ketton stone such remarkable weathering qualities (it was used for the building of the church of St. Dunstan's in the East) provide an ideal base for Portland cement. The two brands of cement manufactured there—"Ketco" Portland cement and "Kettocrete" rapid-hardening Portland cement—are marketed through Messrs. Thos. W. Ward, Ltd., Albion Works, Sheffield, to whom inquiries should be addressed.

## Swimming Baths in Concrete.

The Cement Marketing Co., Ltd., Portland House, Tothill-street, S.W.1, have recently issued a booklet dealing with the lining of swimming baths with white and coloured concrete. The range of materials supplied by the Cement Marketing Co., Ltd., provides for four different treatments, each producing a surface possessing individual characteristics. These methods, briefly, are as follows :—(1) Building the wall and floor of the bath with pre-cast units faced wtih polished white or coloured concrete and backing them with mass or reinforced concrete. In this way the unit largely takes the place of the inner shuttering which normally would be required for building the *in situ* wall. (2) By building an *in situ* wall with a backing of grey concrete and a facing of special white concrete so that the two different mixes are monolithic. This is carried out by means of a sliding shutter. An interesting article with diagram well illustrates this process. (3) Applying a rendering of white or coloured cement mixture to walls and floor, having first made provision for the necessary key. (4) By spraying or brushing special cement in white or colour direct on to the plain concrete walls and floor. The description of these methods is illustrated by drawings and photographs in colour of work carried out. Copies of the booklet—which is produced in the workmanlike style associated with this company's literature—will be forwarded to any who may care to apply.

# TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.*
† Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*
¶ Denotes *accepted by H.M. Government Departments.*

**Aberdeen.**—60 houses and other offices at Back Hilton-street. Mr. T. Scott Sutherland, architect and quantity surveyor, 10, Albyn-place :—

*The Amiable Building Co., Ltd., Albyn-place, Aberdeen.

**Aberlour.**—Reconstruction and additions, etc., to the Church of Scotland. Messrs. J. & J. Willet, architects and quantity surveyors, Elgin :—

*Digger, brick and mason*—*D. McIntosh, Craigallachie.
*Plumber*—*R. M. Morrison, Aberlour Works, 46, High-street, Aberlour.
*Painting*—*J. A. Milne, Aberlour Drysalteries, Banffshire.
*Joinery, carpentry and ironmongery*—*A. & R. Dunbar, Pobine Cabinet & Saw Mills, Craigallachie.
*Plaster* — *A. Bain, Aberlour Cement Works, Aberlour.
*Slater*—*W. Sinclair, Aberlour.
*Heating installation, etc.*—*E. Annan, Aberlour Sanitary and Heating Engineering Works, 109, High-street, Aberlour.

**Argyllshire.**—Reconstruction of Toward-Strachan-road, for the C.C. Mr. George Wishart, County Engineer and Surveyor, Lochnett-street, Lochgelshead :—

*King & Co., Ltd., 280, Clyde-street, Clydeside, Glasgow ..... £24,086

**Barrow-in-Furness.**—Alterations to the Cavendish Hotel, Cavendish-street, for Messrs. J. Thompson & Co., Ltd., 237, Dalton-road. Messrs. Wadham & Son, architects, 111, Duke-street :—

*Fletcher & Sons, Barrow-in-Furness.

**Beadnell.**—Alterations and additions to the "Craster Arms" Hotel. Mr. J. R. Wallace, architect, Northumberland-square, North Shields :—

*T. Gregory, Seahouses.

**Belfast.**—Public elementary school in Avoniel-road, for the Corporation. Mr. R. S. Wilshere, F.R.I.B.A., architect :—

‡Wm. Logan & Sons, Ltd. ... Approx. £23,000

**Belfast.**—Steel work at the Central Telephone Exchange, May-street :—

*Musgrave & Co., Ltd., Belfast.

*Steel windows*—
*Braby, Ltd.

**Belfast.**—Public shelter in Botanic Gardens-park, for the Corporation. Mr. R. B. Donald, City Surveyor :—

*Wm. Scott & Sons, Ltd., Belfast ... £499 10

**Belfast.**—200 semi-detached houses at the Cliftonville estate, for the Woolwich Equitable Building Society, Ltd. :—

*J. & R. W. Taggart, Ltd., Belfast.

**Belfast.**—Painting section 2 of the City Hall interior, for the Estates Committee. Mr. R. B. Donald, City Surveyor :—

*G. Morrow & Sons, Clifton-street, Belfast ..... £515

**Belper.**—Reconstruction of bridges, Nos. 24, 36 and 37, between Ambergate and Derby, for the L.M. & S. Railway Co. :—

*Mitchell Bros., Sons & Co., Ltd., Westminster, S.W.1.

**Birkenhead.**—276 houses and flats in Beaufort-road, for T.C. :—

*G. P. Snape & Sons, Birkenhead ... £38,067

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'PHONE. BER: 1151


**Birmingham.**—Assembly hall in Lyttleton-road, Stechford, for the Committee of the Y.M.C.A. Mr. A. Lewis, architect, 34, Client-road, Grafton-road, Handsworth :—

*F. Perkins & Son, Ltd., Birmingham.

**Birmingham.**—Alterations to premises in Martineau-street, including erection of a large arcade shopfront :—

*Steelwork*—
*Partridge & Co., Walsall.
*Building work*—
*Hartley Smith, Ltd., Birmingham.
*Shopfitting work*—
*Cheltenham Shopfitting Co., Ltd., Cheltenham.

**Bishopbriggs.**—48 houses at Bishopbriggs, Crowhill-road, Silo. Mr. Peter Smith, County Housing Architect and Engineer, Clydesdale-street, Hamilton :—

*Excavation, brick and mason*—
*Linden & Inglis, Calder-street, Coatbridge ..... £6,097 11 7
*Joinery carpentry and ironmongery*—
*William Chambers & Son, Ltd., Flemington Goods Station, Motherwell.
*Slater*—
*A. Rowatt, The Cement Works, Hamilton ..... £1,629 19 1
*Plumber*—
*T. Porter & Sons (Glasgow), Ltd., St. James-street, Govan, Glasgow ..... £1,928 3 1
*Plasterer*—
*Williamson Brothers, Thistle Cement and Plaster Works, Kirkintilloch ..... £782 0 4
*Painter*—
*T. Hastie & Sons, 2, Tallis-street, Bridgeton Cross, Glasgow ..... £454 19 7
*Electricity fittings and installation*—
*T. Edwards, 260, Great Western-road, Hillhead, Glasgow ..... £186 10 8

**Bolton.**—Church mission hall in Tettershall-avenue, for St. Peter's Parochial Church Council Mr. F. Freeman, L.R.I.B.A., architect, 21, Wood-street :—

*J. Davies, Kearsley, near Bolton.

**Bridge-of-Allan.**—New Masonic Temple, etc. Messrs. Simpson, McMichael & Davidson, architects, 12, King-street, Stirling :—

*Excavation, brick and mason*—*J. Syme.
*Slater*—*K. Williamson, Ashley House.
*Joinery, ironmongery and carpentry*—*W. Sprout & Sons, Rosay Undertaking Works.
*Plumber*—*W. Anderson.
*Painter*—*J. D. Smith, Causeywayhead Drysalterers, Stirling.
*Plasterer*—*R. Williamson.
*Electricity fittings and installation*—*Gould & Robertson.
Remainder of Bridge of Allan.)

**Bury.**—Two garages in Oaklands-street, for the T.C. Mr. J. Chadwick, Borough Surveyor :—

*J. H. Seddon, Bury.

**Cardonald.**—Range of shops and other accommodation at Meiklerigg-road and Moss-road. Messrs. John Laird & Sons, architects and surveyors, 11, Bothwell-street, Glasgow, W.C.2. :—

*Excavation, brick, mason, joinery, carpentry and ironmongery*—*Dick & Benzie, Forth Wright and Cabinet Works, 87, Forth-street, Pollockshields, Glasgow.
*Plumber*—*R. Renfrew & Sons, Ltd., 158, North-street, Charing Cross, Glasgow, W.C.2.
*Plaster*—*R. Jolly & Sons, 62, Coburg-street, Gorbals, Glasgow, S.S.

**Carlisle.**—Extensions and alterations to premises, 38, Fisher-street, for the Cumberland Co-operative Benefit Building Society. Messrs. Benwell & Slack, F.R.I.B.A., architects, 22, Lowther-street :—

*J. & R. Bell, Carlisle.

**Carlisle.**—Alterations to 10, Portland-square and erection of a Masonic Temple at rear for the Carlisle Masonic Hall Co., Ltd. Mr. S. W. B. Jack, architect, Lloyds Bank-chambers :—

*Builders*—*J. & R. Bell.
*Steelwork*—*P. & W. Maclellan, Glasgow.
*Carpenters and joiners*—*G. Simpson & Sons.
*Slater*—*G. Irving.
*Plumbing*—*W. Batey & Sons.
(Reminder of Carlisle.)

**Carnwath.**—16 houses, for the Lanarkshire C.C. Mr. Peter Smith, County Architect and Housing Engineer, Clydesdale-street, Hamilton :—

*Excavation, brick and mason*—
*Bryce & Symington, 22, Kirkton-Avenue, Carluke ..... £1,971 2 8
*Joinery, carpentry and ironmongery*—
*Stewart & Co. (Wishaw), Ltd., The Wright Works, Carluke... 1,488 18 0½
*Slater*—
*J. Scott, Queen-street, Rutherglen ..... 489 19 8
*Plumber*—
*W. A. Dunlop & Sons, 128, High-street, Lanark ..... 614 18 3
*Plaster*—
*W. Black, Hill-street, Wishaw... 250 10 5½
*Painter*—
*Hillan & Allan, 32, Hamilton-road, Bothwell ..... 155 5 5

**Chesterfield.**—Tutors house at Cliff College, and four cottages near the college, for the Principal. Mr. G. R. Bower, architect, 13, St. James-row, Sheffield :—

*Builder*—*D. Sheldon.
*Joiners*—*J. W. & J. Mettam, Bakewell.
*Slaters*—*J. & W. Sellars, Bakewell.
*Plasterers*—*E. Bland & Son.
*Plumber*—*W. Bramwell, Bakewell.
*Painter*—*Hobbs.
(Remainder of Baslow.)

**Choppington.**—School for 150 scholars, for the Northumberland C.C. Mr. W. W. Tasker, F.R.I.B.A., architect, 17, Claremont Road, Newcastle :—

* J. Goulding & Sons, Blyth ..... £3,677

**Coventry.**—Construction of the Canley outfall sewer, and for extensions at the Finham sewage disposal works, for the T.C. :—

*S. Johnson & Sons (Mirfield), Ltd. ..... £36,542 8s.
(In lieu of tender withdrawn.)

**Crammond Brig.**—30 houses and other accommodation at Cierniston-road. Mr. A. H. Mottram, architect and surveyor, 50, Frederick-street, Edinburgh :—

*Edinburgh Housing Association, Ltd., 27, Alva-street, Edinburgh.

**Dukinfield.** — Steel bridge with a concrete decking to replace the existing wooden structure over the River Tame from Park-road to Aston site, near Texas Mills, for the Corporation. Mr. E. J. Stannion, Borough Surveyor :—

*J. Booth & Sons, Bolton.

**Durham.**—The County E.C. has accepted the following tenders for general repairs and electrical work at various schools. Mr. F. Willey, County Architect, 34, Old Elvet, Durham :—

*T. B. Watson & Sons, Stockton, electric lighting and heating of additional buildings at Billingham Council school, £537; and similar work at Howden Council school, £412.
*G. W. Stoddart, Rowlands Gill, general repairs to Chopwell East Council school, £255; and similar work at High Spen senior mixed Council school, £236.
*Shield Bros., Swalwell, general repairs to Swalwell Council school, £309.
*R. Telfer & Sons, Spennymoor, additions to Witton Park Council school, £698.
*Steel & Co., Sunderland, remodelling of heating apparatus at Boldon Colliery Council school, £287.
*J. Stokoe, New Washington, conversion of and repairs to out offices at the East Boldon Council school, £350.
* D. Glen, Jarrow-on-Tyne, conversion of play shelter into classroom at Durham Girls' County school, £334.

**Durham.**—New stores for the P.A.C., at the Medomsley Cottage Homes :—

*Dixon Elliott & Sons, Durham ..... £730

**Durham.**—Reconstruction of the Lumley Forge bridge, for the C.C. Mr. W. J. Merrett, County Surveyor, 43, Old Elvet, Durham :—

*R. Henderson & Son, Ltd., Pontelaud ..... £3,106

**Durham.**—New vagrancy wards for the County P.A.C. Mr. W. J. Merrett, County Surveyor, 43, Old Elvet, Durham :—

Bishop Auckland Institution—
*G. W. Lazenby & Co., Ferryhill ..... £4,440
Easington Institution—
*Randle & Co., Sunderland ..... 2,258

**Eccles.**—Shelter at Eccles recreation ground, Oxford-street, for the T.C. Mr. T. Elce, Borough Surveyor :—

*A. Fenton, Manchester ..... £261

**Edinburgh.**—40 double villas at Warrester-avenue :—

*George R. Black, 214, Leith-walk, Leith.

**Edinburgh.**—Reconstruction and additions at the Merchieston Club. Messrs. Maclennan & Cunningham, architects and surveyors :—

*J. Miller & Son, Miller-place, Edinburgh.

**Ellesmere.**—Alterations to Salop and West Counties Savings Bank. Mr. H. D. Richardson, L.R.I.B.A., architect, Central-chambers, 15, Pride Hill, Shrewsbury :—

| | |
|---|---|
| Frost, Ltd., Wolverhampton | £357 10 |
| W. E. Samuel, Wrexham | 305 5 |
| Henry Price & Son, Shrewsbury | 293 0 |
| Thomas Morris & Sons, Shrewsbury | 238 0 |
| *Henry Lea & Co., Ltd., Shrewsbury | 237 0 |

**Ely.**—Four houses at Hale Drove and 20 houses at Camping-close, Littleport, for the R.D.C. Mr. C. W. Smith, chartered architect, 14, St. John's-street, Cambridge :—

| | | |
|---|---|---|
| *F. Hale & Sons, Sutton, Ely | (4) | £1,160 |
| *H. Lofts & Son, Littleport, Ely | (12) | 3,192 |
| *Hobbs & Fineham, Downham, Ely | (8) | 2,224 |

**Esh Winning.**—Alterations to the main buildings and out offices at the Council school, for the Durham County E.C. Mr. F. Willey, architect, 34, Old Elvet, Durham :—

*H. Eisel, Coundon ..... £1,900

**Gilderstone.**—40 houses, construction of roads and sewers on land off Town-street. Messrs. Walker & Collinson, architects, 12, Exchange-buildings, Bradford :—

*Harrison Spensley & Sons, Morley.

**Glasgow.**—Joiners and allied works at the Copland-road housing scheme, for the T.C. Mr. William McNab, Housing Architect, Trongate :—

*W. Gibson & Son, St. James Cabinet Works, St. James-street, Paisley.

**Glasgow.**—New private wing at Victoria Infirmary. Messrs. Watson, Salmond & Gray, architects, 242, West George-street :—

*Excavation, brick and mason*—*J. Train & Co., Ltd., George-square.
*Joinery, carpentry and ironmongery*—*J. Cochrane's Trustees, Dobbin Loan, Townhead.
*Steel casements*—*McLean & Co., Bath-street.
*Plumber* — *G. Munro & Co., West Campbell-street.
*Plaster* — *G. Rome & Co., Townend-street, Garscube.
*Tile and terrazzo*—*Toffolo Jackson & Co., 110, West Regent-street, Blytheswood.
(All of Glasgow.)

**Glasgow.**—606 houses at Blackhall, for the T.C. Mr. William McNab, housing architect, Trongate. Mr. J. Stark, quantity surveyor, 219, St. Vincent-street :—

*Excavation, brick and mason*—*T. Anderson & Son, 40, Auchingramont-road, Hamilton.
*Plumber*—*J. Wilson & Son, Espidaire-street Sanitary Engineering Works, Paisley.
*Slater*—*Peter White & Co., Ltd., Paul-street, Parliamentary-road, Glasgow.
*Joinery, carpentry and ironmongery*—*T. MacDougall Construction Co., Ltd., East Keppoch Works, Glasgow.
*Plaster*—*H. S. Bathgate, Duke-street, Lower Dennistoun, Glasgow.
*Glazing*—*W. Purdon & Sons, Ltd., Albion Glass and Glazing Works, George-street, Glasgow.

**Glasgow.**—Reconstruction and extension at 497, Gallogate. Mr. John Reid, architect and surveyor, 233, West Regent-street, W.C.2 :—

*Excavation, brick and mason*—*T. Cooper & Co., 89, Alexandria Park-street, Upper Dennistoun, Glasgow.
*Joinery, carpentry and ironmongery*—*J. Garni, Cathcart Wright & Joinery Works, Glasgow.
*Steel structural*—*Fleming Brothers, Bath-chambers, Bath-street, Blytheswood, Glasgow.
*Marble and terrazzo*—*Toffolo Jackson & Co., 110, West Regent-street, Blytheswood, Glasgow.

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**Grimsby.**—Extensions to St. Stephen's Church, for Vicar and Parochial Church Council. Mr. J. G. Cresswell, F.R.I.B.A., architect, 77, Victoria-street :—

*Wilkinson & Roughton, Ltd., Cleethorpes.

**Henstead.**—Houses, for the R.D.C. :—

*A. J. Bilham (10 houses at Hethersett).
*W. Evans & Son (40 houses in other parishes).

**Hetton.**—Shelter on the Broomhill housing estate, for the U.D.C. :—

*G. M. Pearson, Lyons-terrace, Hetton £118

**Hornchurch.**—Convenience in the recreation ground, Park-lane, for the U.D.C. Mr. F. Alderson, surveyor :—

| | | | |
|---|---|---|---|
| S. J. Davis, Romford | £186 | 7 | 6 |
| C. and G. Contractors, Ltd., Romford | 160 | 0 | 0 |
| Baker, Hammond and Laver, Rainham, Essex | 145 | 0 | 0 |
| Myall Bros., Ilford | 142 | 0 | 0 |
| Bailey & Goates, Romford | 134 | 10 | 2 |
| W. H. C. Heath & Sons, Seven Kings | 120 | 19 | 6 |
| *R. Haslam & Sons, 188, Brentwood-road, Romford | 103 | 17 | 10 |

**Horsham.**—Six pairs of cottages at Reeds-lane, Southwater, for the R.D.C. Mr. V. Bartrim, building surveyor, 42, Albion-terrace :—

*Modern Construction Co., Parliament Mansions, Victoria-street, London, S.W.1 ..... £3,250

**Hull.**—1,000 houses, for the London & Yorkshire Housing, Ltd :—
*R. G. Tarran, Hull.

**Jarrow-on-Tyne.**—Parish hall on a site near Croft-terrace, in connection with St. Paul's Church. Messrs. Hicks & Charlewood, architects, 4, Mosley-street, Newcastle :—
*D. Glen, Back Queen's-road, Jarrow.

**Keighley.**—Additions to works in Greengate-road, for Messrs. G. Hattersley & Sons, Ltd. Messrs. R. B. Broster & Sons, architects, Craven Bank-chambers, North-street :—

*Builder*—*T. Duckett, Skipton.
*Joiners*—*Pearson & Wharton, Ltd.
*Plumber*—*J. W. Cragg.
*Patent glazing*—*W. H. Heywood & Co., Huddersfield.
*Steelwork*—*H. Barrett & Sons, Ltd., Bradford.
(Remainder of Keighley.)

**Kidderminster.**—20 additional houses on the Broadwaters estate, for the T.C. Mr. J. Hawcroft. Borough Surveyor :—
*W. Cooper & Sons, Kidderminster, £330 per house.

**Kirkburton.**—12 scullery type houses at "Turnshaws," for the U.D.C. Mr. G. M. Barr, architect and surveyor, Manor Lodge, Flockton :—

*Builders*—
*Huddersfield Guild Co., Viaduct-street, Huddersfield ..... £1,320 12 0
*Joiners*—
*Kaye & Hirst, Dalton, Huddersfield ..... 840 0 0
*Plumber*—
*H. Webster, Lepton, Huddersfield 400 11 8
*Plasterer*—
*R. H. Lockwood, Horbury, near Wakefield ..... 222 0 0
*Slaters*—
*Pickles Bros., Leeds ..... 180 0 0
*Grates and fixtures*—
*Lee & Briggs, Horbury, nr. Wakefield ..... 117 12 0

**Lanarkshire.**—48 houses on the Cairneymount-road site, Carlake, for the C.C. Mr. Peter Smith, Housing County Architect and Engineer, Clyesdale-street, Hamilton :—

*Excavation, brick and mason*—
*E. Morgan & Co., 108, Townhead-street, Hamilton ..... £6,135 13 6½
*Joinery, carpentry and ironmongery*—
*S. Brownlie & Son, Cambuslang Saw Mills ..... 4,802 11 6½
*Slater*—
*A. Dunn, 511, Main-street, Bellshill ..... 1,583 4 0½
*Plumber*—
*J. Laing & Sons, 20, Kirk-road, Wishaw ..... 2,051 5 0
*Painter*—
*Hillan & Young, 32, Hamilton-road, Bothwell ..... 495 14 6½
*Plaster*—
*H. McLatchie, Larkhall Cement Works, Larkhall ..... 827 4 5½
*Electrical fittings and installation*—
*J. Edwards, 260, Great Western-road, Hillhead, Glasgow ..... 257 2 0

**Largs.**—Reconstruction and new nurses' home at East Park Homes. Mr. John Fairweather, architect and surveyor, 182, Trongate, Glasgow, C 1 :—

*Excavation, brick and mason*—*J. G. Dewar, 32, Second-avenue, King's Park, Glasgow.
*Joinery, carpentry and ironmongery*—*J. Livingstone & Sons (Contractors)), Ltd., 108, West Regent-street, Glasgow, W.C.2.
*Plumber*—*J. Irving & Sons, Lade-street, Largs.
*Slater*—*M. Gillespie, Morris-street, Largs.
*Plasterer*—*D. Scobie, 17, Montgomerie-street, Irvine.
*Heating engineering*—*C. F. Howden, 585, Garscube-road, Queen's Cross, Glasgow.
*Painting*—*D. Guthrie, The Drysalteries, Boyd-street, Largs

**Leeds.**—Reconstruction of premises, formerly St. Phillip's Church schools, at the western end of Wellington Street, for Messrs. Sheldons, Ltd. Messrs. A. & F. Mosleys, Ltd., architects, Wormald Row:—

*W. T. Pearson, Ltd.

**Leeds.**—Garage, workshops and offices fronting Regent Street, for the Central Garage, Ltd., Town Hall-square, Bradford:—

*K. Holst & Co., Ltd.

**Limerick.**—Development works in connection with the Island Field housing scheme, for the Corporation:—

*Pioneer Road Construction Co., Dublin ..... £16,536 10 6

**Lisburn.**—Erection of new school at Nicholson-square and Dublin-road, for the Lisburn & Belfast Regional E.C. Messrs. Ferguson & M'Ilveen, Ltd., architects, Belfast:—

*Wm. Dowling, Ltd., Cromwell-road, Belfast ..... £11,000

**Liverpool.**—New Catholic Church of St. Teresa, Utting-avenue and Sedgmoor-road, Norris Green, for Rev. M. O'Ryan, O.M.I., Superior. Mr. F. E. Badger, architect, Cunard-buildings, Pier Head:—

*C. Doyle, Ltd., Liverpool.

**London.**—Tenders accepted by H.M.O.W. for the week ended November 2:—

Liverpool Head Post Office—alterations—Tysons (Contractors), Limited, Dryden-street, Liverpool.

Huddersfield Head Post Office—erection of garage, etc.—J. Wimpenny and Co., Linthwaite, Huddersfield.

Bradford Sorting Office and garage—erection—Thos. Wilkinson and Sons (Builders), Ltd., Olive Grove Works, Midhill-road, Sheffield.

Ministry of Transport Experimental Station, Harmondsworth—extensions—A. Roberts & Co., Ltd., 74, Earl's Court-road, Kensington, W.8.

Mount Pleasant Letter Office (Contract No. 3)—racking—Educational Supply Association, Ltd., Esavian Works, Stevenage.

19, Old Jewry, E.C.2.—internal and external painting—C. and T. Painters, Ltd., Mordaunt-road, N.W.10.

Mount Pleasant New Letter Office Extension (contract No. 4) — racking — J. Greenwood, Ltd., 12/14, Arthur-street, E.C.4.

**¶London.**—Tenders accepted by H.M. Air Ministry for the week ended October 28:—

Catfoss—type "A" aero shed—Redpath Brown & Co., Ltd., 19, Waterloo-street, Glasgow.

Milton—married officers' quarters—J. E. Harper & Sons, 72, Lombard-street, Birmingham.

**London.**—Erection of the central and southern sections of a five-story block of dwellings at Hughes-fields estate, Greenwich, for the L.C.C.:—

| | | *Empire materials.* |
|---|---|---|
| Walter Lawrence & Son, Ltd. | £42,667 0 | £42,667 0 |
| E. Clarke & Sons, Melton Mowbray | 42,317 8 | — |
| Humphreys, Ltd. | 40,989 0 | 41,257 0 |
| W. H. Gaze & Sons, Ltd. | 40,983 0 | 40,983 0 |
| Corolite Construction, Ltd. | 40,248 0 | 40,248 0 |
| J. E. Billings & Co., Ltd. | 39,187 0 | 39,187 0 |
| A. T. Rowley | 39,148 0 | 39,148 0 |
| Unit Construction Co., Ltd. | 39,102 0 | 39,102 0 |
| F. & H. F. Higgs, Ltd., | 39,010 0 | 39,010 0 |
| Albert Monk, Edmonton | 38,917 0 | 38,917 0 |
| Wilson Lovatt & Sons, Ltd., Wolverhampton | 38,883 0 | 39,004 0 |
| C. P. Roberts & Co., Ltd. | 37,795 0 | 37,795 0 |
| Gee, Walker & Slater, Ltd. | 37,467 0 | 37,467 0 |
| R. J. Rowley, Ltd. | 37,373 0 | 37,373 0 |
| C. Miskin & Sons, Ltd., St. Albans | 37,240 0 | 37,240 0 |
| Rowley Bros., Ltd. | 37,100 0 | 37,100 0 |
| *Henry Boot & Sons, Ltd., Hayes, Kent | 36,984 16 | 36,984 16 |

(Architect's estimate on basis Empire materials, £37,774.)

(Remainder of London.)

**London.**—Cleansing, painting and repairs and the tiling of two sculleries at Islington institution and St. John's-road relief office, for the L.C.C.:—

| | |
|---|---|
| Holland & Hannen and Cubitts, Ltd. | £1,610 |
| Patman & Fotheringham, Ltd. | 1,599 |
| W. T. Lawrence & Son | 1,598 |
| Joseph Darch, Ltd. | 1,598 |
| George Keetch & Sons, Ltd. | 1,593 |
| Whitbys, Ltd. | 1,553 |
| John C. Mather & Son | 1,541 |
| G. Godson & Sons, Ltd. | 1,375 |
| J. McKenzie | 1,256 |
| Stevens & Sons | 1,170 |
| Thomas Cole (Barnsbury), Ltd. | 1,145 |
| *W. T. Ricketts & Sons, Ltd., 73, Southgate-road, N.1 | 1,017 |

(Chief Engineer's estimate: £1,080.)

(All of London.)

**London.**—Internal cleansing, painting and repairs at St. Marylebone institution, for the L.C.C.:—

| | |
|---|---|
| James Carmichael (Contractors), Ltd. | £2,655 |
| Bovis, Ltd. | 2,276 |
| Killby & Gayford, Ltd. | 2,275 |
| Holland & Hannen and Cubitts, Ltd. | 2,205 |
| Joseph Darch, Ltd | 2,163 |
| Whitbys, Ltd. | 2,130 |
| Falkus (Public Works), Ltd. | 1,998 |
| W. S. Barton & Co. | 1,920 |
| Lilly & Sons, Ltd. | 1,657 |
| *Cole, Loasby & Co., Ltd., 45, Museum-street, W.C.1 | 1,560 |

(Chief Engineer's estimate: £1,570.)

(All of London.)

**London.**—Alterations to the sanitary accommodation at Westminster Institution, for the L.C.C.:—

| | |
|---|---|
| Cole, Loasby & Co., Ltd. | £4,052 |
| C. P. Roberts & Co., Ltd. | 4,018 |
| W. J. Dixon & Sons | 3,998 |
| Whitbys, Ltd. | 3,953 |
| Triggs & Co., Ltd. | 3,875 |
| Thomas D. Leng | 3,846 |
| C. H. Boyd and Son, Ltd. | 3,753 |
| Sims & Russell | 3,692 |
| J. & C. Bowyer, Ltd. | 3,553 |
| Harry Groves & Son | 3,441 |
| *H. T. Oliver & Sons, 1-3, Brixton-road, S.W.9 | 3,363 |

(Architect's estimate, £3,560.)

(All of London.)

**London.**—Cleasing, painting and repairs to certain casual wards at The Hostel and the Night Office, for the L.C.C.:—

| | |
|---|---|
| White & Johnson, Ltd. | £4,193 |
| Vigor & Co. (Poplar), Ltd. | 3,740 |
| R. Woollaston & Co. | 3,603 |
| C. & T. Painters, Ltd. | 3,315 |
| G. N. Watts, Ltd. | 3,306 |
| H. Lawrence & Sons | 3,302 |
| Falkus (Public Works), Ltd. | 3,072 |
| George Jones & Sons | 2,963 |
| *E. Proctor & Sons, Rockmount-road, S.E.18 | 2,850 |

(Chief Engineer's estimate: £2,960.)

(All of London.)

**London.**—Houses in Fairwyn-road, Forest Hill, S.W. Mr. R. B. Rowell, A.R.I.B.A., architect, 5, Triangle, Upper Richmond-road, S.W.15:—

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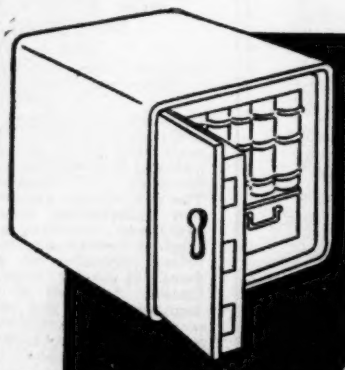
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